PULP & PAPER

OCTOBER 1948
Vol. 22 No. 12
Member Audit Bureau of Circulations
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The Production and Management Journal Covering North America's Wood Pulp, Paper, Paperboard and Cellulose Industries

by MILLER FREEMAN PUBLICATIONS, INC.

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SUBSCRIPTION inc. North American Review Number—$3 for 1 yr. and $5 for 2 yrs. in U. S., Canada, Mexico and other member nations of Pan-American Union ($4 for 1 yr. and $7 for 2 yrs. in other countries).

"The Cellulose Age"

EDITORIALS

Limit Interior Department Powers

Secretary of Interior Krug may be packing up his bags and leaving Washington next January, which is a little matter to be decided by the voters in November. But meanwhile, we are advised, he has personally guaranteed to give every bit of support he can to getting the proposed new pulp mill at Ward's Cove, Alaska, into "full production," to use his own words.

That promise is significant because under our government, the Interior Secretary happens to have unusual responsibilities and powers over Alaska as a territory and over the Indians as government wards. Also, over industries such as fisheries, which might possibly have conflicting interests with a pulp mill, although a recent Forest Service "on-the-scene" survey came to the conclusion that the unusually deep waterways and bays of Alaska will prevent any noticeable de-oxygenation of waters by mill effluent.

As regards the Indians and their "aboriginal" claims to the pulpwood of Alaska, which were stimulated by Interior Secretary Ickes, there is still one more step that the U. S. Congress can, and should, take, when it reconvenes in Washington. It should enact legislation to repeal the arbitrary powers of the Interior Department to create Indian reservations in the public lands of Alaska.

Mr. Krug indicated he was not opposed to such legislation when the bill was proposed during the last regular session of Congress. But whether Mr. Krug is around in January or not, the next Congress should bring out this measure again and vote it through.

The authority vested in the Interior Department to set aside public lands for the Indians had long been a deterrent to the territory's industrial development. Mining, pulp and fisheries interests had been discouraged from investing large sums in many sections of Alaska because of the uncertainty of property rights.

Senator Butler, Republican, of Nebraska, sponsored a resolution to repeal the powers this year.

The hearings held in Washington on his resolution brought out evidence that Mr. Krug's underlings in the Interior Department were actively encouraging the Indian claims and cooking up a scheme to create ten new Indian reservations in the pulpwood areas. When this came out in the open, Mr. Krug denied any personal hand in it.

Before leaving Washington, D. C., after the special summer session, Alaska's Delegate E. L. Bartlett called on Secretary Krug. According to reports reaching **PULP & PAPER**, Secretary Krug indicated that he recognizes the strong sentiment that has developed against his department's earlier Indian rights policy in Alaska. He gave Mr. Bartlett assurances that no new Indian reservations will be created, at least in southeastern Alaska.

This is an important concession, since that is the area set aside for pulp and paper mills. The Interior Department thus appears to have seen the handwriting on the wall. But something more tangible than that is needed. The determination of property rights in Alaska should rest with Congress itself, as it did until the Ickes era. Legislation similar to the Butler resolution should be enacted by the 81st Congress (See page 89 for background on this bill).

The Biggest Year Ever in Canada

If anyone doubted that there is a dynamic forest products industry north of the Great Lakes and St. Lawrence and the Peace Arch on Puget Sound just take a gander at these figures.

More money is being invested this year in construction and machinery for the wood and paper products industries in Canada than ever before according to a survey recently completed by the Canadian government.

This expenditure amounts to an estimated $136,500,000 compared with $121,900,000 in 1947, $79,400,000 in 1946 and $41,300,000 in 1945.

Actual construction in the wood and paper products industries this year represents an outlay of $36,800,000, according to this source, and machinery and equipment accounts for $99,500,000.

These figures are exclusive of logging and other woods operations, on which the estimated outlay this year is $20,600,000, of which $9,400,000 represents construction and $11,200,000 machinery and equipment.

Most of the above outlay is for pulp and paper, which is still the No. 1 industry of Canada.

Packaging Show Is Success

The first western packaging show, in August, held in San Francisco was a big success. Expected attendance was 2,500, but it turned out to be over 6,000.

The quality of the attendance was high, and most exhibitors reported good business done and many leads developed.

Significantly, a number of exhibitors report that upwards to 50% of all those who visited the show were interested in food packaging—processed, prepackaged and bakery items in particular. The event, therefore, demonstrated both that the West is a big and active market for packages and packaging machines, and that the big share of the western packaging market is food packaging.

In This Issue—

See Page 32 for a Description of This Month's Cover Picture

Secretary Krug Personally Assures PULP & PAPER Magazine that Pulp Companies Will Have Unchallenged Title to Alaska Timber

In order to settle any doubts as to the position of the Department of Interior regarding Indian villages vs. U. S. Forest Service (Department of Agriculture) claims to pulp timber now being sold to private industries, PULP & PAPER wired direct inquiry to Secretary Krug.

Despite past conflicts between the two government departments affecting disposal of Alaska timber and the actions of attorney for Indians (whose claims were originally inspired by former Secretary of Interior Ickes) Mr. Krug's reply clearly upholds the ownership of Ketchikan Pulp & Paper Co. in the timber they recently purchased. Other companies which may purchase timber for pulp operations presumably would have the same assurances.

Here follows PULP & PAPER'S inquiry and the Secretary's reply:

September 7, 1948

Julius A. Krug
Secretary of the Interior
Washington, D. C.

In view signing of an Alaska Forest Service timber contract and possibility other contracts being signed for pulp mills, would appreciate an authoritative statement by you regarding any possible liability these companies face in connection with Indian aboriginal timber claims.

EDITOR, PULP & PAPER

THE SECRETARY OF THE INTERIOR
WASHINGTON

September 10, 1948

Editor PULP & PAPER
Seattle, Wash.

It is assumed that your telegram of September 7 refers to sales of timber in the Tongass National Forest in Alaska made by the Secretary of Agriculture pursuant to the joint resolution approved August 8, 1947 (Public Law 385, 80th Cong.)

The position of this Department is that the joint resolution vests in the Secretary of Agriculture the exclusive power to sell timber growing on lands within the boundaries of the Tongass National Forest, including the timber in any areas that may be subject to native possessory rights. *It is the opinion of this Department that purchasers of timber sold pursuant to the joint resolution acquire valid title free from any claim on the part of the natives.*

Sincerely yours,

J. A. KRUG, Secretary of the Interior.

(For background on Indian claims see Page 89.)

COMING INDUSTRY MEETINGS

Superintendents' Ass'n N. W. Div. Fall Meeting—Merrill, Wis ..... Sept. 24-25

Pacific Coast TAPPI (Engineering) Leopold Hotel, Bellingham, Wash. ..... Sept. 28

Penn. - N.J. - Dela. Supts' Ass'n.—Ambassador Hotel, Atlantic City, ... Oct. 1-2

New England Materials Handling Exposition—Mechanics Hall, Boston ..... Oct. 5-7

Second Annual Southern Forest Festival—Valdosta, Ga.....Oct. 5-7

TAPPI Testing Conference—Mellon Institute, Pittsburgh, Pa. ..... Oct. 11-13

Lake States Section TAPPI—American Legion Club House, Appleton, Wis. ..... Oct. 12

Pkg. Machinery Mfg'ers Institute—(16th Annual Meet) — Hotel Roosevelt, N.Y. ..... Oct. 12-13

New England TAPPI—Roger Smith Hotel, Holyoke, Mass. ..... Oct. 15

Forest Products Research Society, Pacific Northwest Section—Hotel Vancouver, Vancouver, B. C., and Powell River, B. C. ..... Oct. 8-10

Empire State TAPPI—Queensberry Hotel Glens Falls, N. Y..... Oct. 15

Chicago TAPPI—Bar Ass'n, Fields Bldg., Chicago ..... Oct. 18

Pacific Logging Congress — Woodcraft Hall, Portland Ore. ..... Oct. 18-20

Annual Safety Congress — Stevens Hotel, Chicago ..... Oct. 18-22

Southern and Southeastern Supts. Divisions Joint Meeting—Atlanta Biltmore Hotel, Atlanta, Ga..... Oct. 20-23

Kalamazoo Valley TAPPI—Columbia Hotel, Kalamazoo, Mich..... Oct. 21

TAPPI Engineering Conference—Statler Hotel, Buffalo, N. Y..... Oct. 25-28

Delaware Valley TAPPI—engineers' Club, Philadelphia ..... Oct. 28

National Paper Trade Assn.—Hotel Stevens, Chicago..Oct. 28-30

Waxed Paper Institute (Annual Fall Meeting) — Congress Hotel, Chicago ..... Oct. 29

Pacific Coast TAPPI—(Slime Control)—Camas. Wash. ..... Nov. 16

Pacific Coast Div, Supt's Ass'n—New Washington Hotel, Seattle, Wn. ..... Dec. 3-4

American Paper & Pulp Assn.—Waldorf-Astoria, New York..... Feb. 20-24, 1949

National TAPPI Convention—Commodore Hotel, New York..... Feb. 21-24, 1949

National TAPPI Coating Convention—Grand Rapids, Mich..... Apr. 26-28, 1949

National TAPPI Fall Meeting—Multnomah Hotel, Portland, Ore... Sept. 12-16, 1949

Paper Industry Salesmen—Midston House, New York City—Every Monday, 12 noon to 2 p.m.

Allied Industries Luncheon Club—Second Monday of month, 12 noon, Commodore Hotel, New York.

Southeast U. S. Trends

NEW RECOVERY UNITS ORDERED

Two most apparent trends among the Southeast coast mills from Richmond to Jacksonville are the still continuing efforts toward added tonnage, and the parallel efforts, through mechanization and rearrangement of wood handling layouts, to get more pulpwood and, if possible, at less cost. There are also many improved chemical recovery units being installed.

Some of these trends have been reported via specific mills in past issues of **PULP & PAPER**. A recent field trip by one of our editors verified the movement. Southern Paperboard Corporation (Robert Gair subsidiary) at Port Wentworth, Ga., began last summer to add an average of 400 tons per day to the Southeast coastal picture. But a number of older mills are bending to add to the total tonnage in this famous papermaking coastal strip.

Briefly, to illustrate the trend, International Paper Co. at Georgetown, S. C., is expanding machine capacity to an unrevealed degree and reputedly is the biggest mill in, the entire world, tonnage-wise. West Virginia Pulp & Paper Co., North Charleston, S. C., is making some rearrangements in their wood handling layout including bark conveyor and installing a new B & W recovery unit and a Koppers precipitator, and already has added a large machine, described in a recent issue of **PULP & PAPER**.

The number of new recovery units going into coast mills indicate that these plants are fixing to burn tens of thousands of new pounds of black liquor solids. Chesapeake-Camp Corporation, Franklin, Va., is putting in a new B & W boiler and recovery system, also.

Chesapeake Corp. of Virginia (no longer connected with Chesapeake-Camp) at West Point is installing a new CE recovery unit, Koppers precipitator, and has already erected a new chimney lined with acid-proof materials. They are rearranging their wood room and installing two new Carthage chippers, and three new concrete chip bins are already up. In the paper mill a stainless steel head box is going on the Puseyjones machine.

VISIBLE IN THE FOREGROUND are the concrete foundations for the new Babcock and Wilcox recovery and the Koppers precipitator which are to be installed at West Virginia Pulp & Paper Co., Charleston, South Carolina. The picture was taken from the conveyor catwalk of the chipper housing.

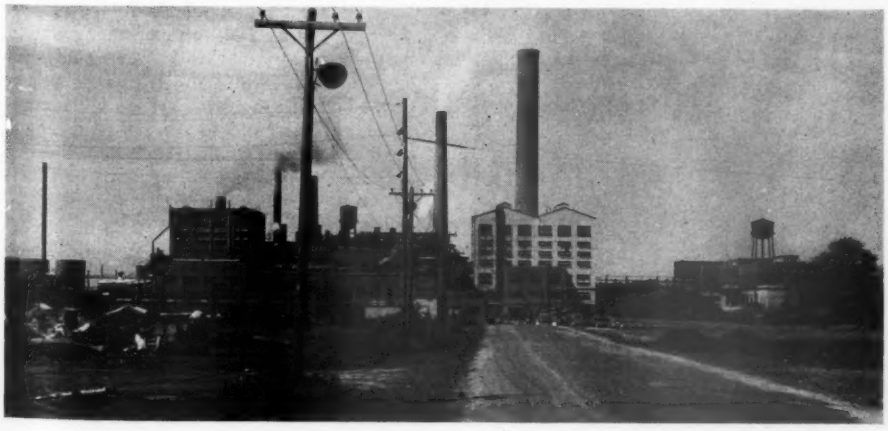
Competition for Wood

In view of the distinct trend toward increased tonnage, it is interesting to view the intense competition for pulpwood along parts of the southeast coast, a factor pointed out in **PULP & PAPER** in many past issues. While most of the mills have their own holdings—Riegel, for example, already has staked out timber for a mill as yet unbuilt — a very large percentage comes from woodlots so that, in some areas, mills find themselves in competition for supply. A few mills operate in "exclusive" areas so that wood competition is not such a problem. An executive in one such mill told **PULP & PAPER** that the eventual situation "in say ten years" would be "of considerable interest, what with the trend toward increased tonnage."

That all the mills are mindful of the eventual situation is apparent. Woodlands divisions are more fully staffed and more attention is being given to mechanization. One big difficulty is that good mechanized equipment is too costly for the average private contractor who furnishes the average mill with a big part of the wood supply.

Everywhere in the southeast, as in other sections, efforts are being made to lower the cost of wood—or at least stop the rise. A mill built ten years ago on the southeast coast is paying three times what it paid for pulpwood at the time of the start-up of the mill.

THIS IS A VIEW OF Chesapeake Corp., of Va., at West Point, Va. The high stack is 250 ft. high and 17 ft. inside in diameter, lined with acid-proof tile and will serve a new Koppers precipitator and a new Combustion Engineering recovery system which are being constructed in front of the stack.



Chesapeake Corp. Adds Equipment

Chesapeake-Camp Corp., Franklin, Virginia, will soon install a new Babcock & Wilcox boiler and recovery unit, according to Karl Thorson, superintendent, in a recent mill interview with a **PULP & PAPER** editor at Franklin.

Chesapeake-Camp makes liner, corrugating, and kraft wrapping paper, as well as kraft bag paper and specialties. The operation includes a sulfate pulp mill. This organization is no longer interlocked with Chesapeake Corp. of Virginia although Elis Olsson, vice-president, holds office in both firms. President of Chesapeake-Camp is J. L. Camp.

Champion Tables Plan To Build Another Texas Mill

Champion Paper & Fibre Co. has shelved its plan for a new mill at Evadale, Texas, according to Reuben D. Robertson, president.

Mr. Robertson stated: "It is true that we purchased a building site at Evadale, Texas, with the expectation of building a pulp mill there, but as we studied the construction costs which are prevailing throughout the country, we concluded that we could not at this time justify the expenditures. Accordingly, we have placed our plans in 'cold storage' for an indefinite period. We do not know when we will withdraw them from that status."

EXPANSION BY RIEGEL PAPER CORP.

OUTPUT INCREASED 20%

JOHN L. RIEGEL, left, President of Riegel Paper Corp. and of Riegel Textile Corp., who is carrying on the tradition of Riegel family leadership in this industry.

WALKER HAMILTON, right, Executive Vice President and General Manager of Riegel Paper Corp.

Riegel Paper Corp., leading producer of glassine and greaseproof papers, has completed most of a $3,000,000 program of maintenance, modernization and expansion which it projected before the war and undertook on a full scale in 1946.

The well-planned program, which increases Riegel's production by 20%, centers mainly at the Milford, N. J., mill, which produces glassine and greaseproof paper. There the expansion includes a new paper machine, enlargement of steam and power plant, new coal handling system, and three new giant supercalenders.

At the company's Warren (N. J.) mill, there has been an improvement in pulp preparation and the bleach plant.

All this was accomplished while the glassine equipment operated seven days a week, as it has been doing for the past seven years. Every item of the improvement was built by the reinvestment of earnings.

The men actively responsible for the program, in addition to John L. Riegel, president of Riegel Paper Corp. (and also of Riegel Textile Corp. with two textile mills in the South), are Walker Hamilton, executive vice president and general manager; Fred I. Jacoby, recently retired as vice president and general superintendent; G. Lamont Bidwell, manager at Milford; R. L. Kerridge, manager of the "Upper Mills" (Warren Glen, Hughesville and Riegelsville); F. S. Leinbach, former assistant to the general manager; and David Miller, Jr., company engineer. But Mr. Riegel is quick to point out that all Riegel employes contributed because their maintenance of production and quality made the program possible.

At Milford, the major part of the recent expansion and improvement has taken place. This mill has eight machines in addition to the new one, and the glassine and other papers from this mill are used on hundreds of nationally famous brands of cereals, crackers and biscuits, gelatines and sweet puddings, tobacco, coffee, sugar, chewing gum, bread, ice cream, soap and other products. It has two 132-in. Yankee Fourdriniers and seven other Fourdriniers ranging from 96 to 156 inches.

The Warren mill has two cylinder machines (96 in. and 124 in.) on jute tag, bristol, wallet and patch stock and other papers. At Hughesville a single Fourdrinier-cylinder machine (110 in.) produces film wrapper, X-ray interleaving paper, addressing machine stock, jute, tympan paper and calender roll paper. The cylinder machine (80 in.) at Riegelsville makes primarily cable paper, cover cap, bristol and mill wrapper.

Description of New Machine

Assembly of the new Rice Barton machine began last winter. By May 1 the entire machine was given a run and a celebration dinner took place May 13.

The new machine is 112 inches on the wire and trims 96 inches. It can be said here that it runs well over 700 feet per minute. The head box is of Riegel and Rice Barton engineers' design with a Valley Iron Works slice. There is an adjustable dam for regulating stock flow from the Bird screen and the two Shartle Centraps ahead.

The suction couch is 28 inches diameter. The first suction roll is 24 inches bronze and the second press suction roll 26¼ inches rubber covered. Suction rolls are Downingtown type. The third press has a 24-inch plain rubber roll. On the removable Fourdrinier there are 63 table rolls. There are 31 paper dryers, 8 felt dryers, 48 inches diameter and 110 inches on the face. Ahead of the dryer section is a smoothing press.

OUR COVER PICTURE FOR THIS MONTH, shown again in miniature in the above engraving, is a photograph of Riegel Ridge, a country club for the employes of the Riegel Paper Corporation. This view shows the patio and main club building. It is located in the beautiful Delaware Valley country of western New Jersey, near the group of Riegel mills.

GEORGE BIDWELL, left, former Riegel executive now retired who invented a number of items of equipment in use by Riegel today.

G. LAMONT BIDWELL, right, Manager at the Milford plant and son of George Bidwell.

Beyond the cooling rolls is a Pope reel, a Cameron Machine Co. constant tension device and a Cameron No. 18 winder. The table, felt and wire return rolls were covered by Manhattan, while the press rolls were covered by U. S. Rubber and Stowe-Woodward. Steam control is by Mason-Neilan Regulator Co.

Years ago the standard paper machine color was maroon, then in later years other colors came into vogue. The new Riegel paper machine goes back to red—but it is a brilliant fire-engine red which is carried out not only on the frame, but on the trim of the Riegel-designed hood. What this does for production is for a color engineer to say—but there is no question but that the new machine room at Milford is a bright spot and the spirit of the machine men is tops.

The machine is driven by a General Electric sectional drive through Falk reduction gears. It is one of the group of modern paper machines now being installed with the latest comprehensive GE electronic controls which give complete and independent control of speeds at various sections of the machine. There is a Bowser liquid control system for lubrication of dryer bearings.

The new machine building is 52 by 271 feet with a 14-foot deep basement. There is 20 feet 6 inches clearance under the ceiling slabs. The structure is steel frame with brick walls and reinforced concrete floors and has a precast concrete roof and ceiling slabs. There are 2 inches of insulation over the roof slabs. Inside wall finish between the operative floor and

ceiling is ceramic glazed tile. The ventilating system is Riegel design, there being an air chamber between the ceiling and roof from which air is diffused into the working area.

Stock Preparation

Stock preparation for the new paper machine is as modern as the machine itself, and at Milford all piping and storage is being revamped for bigger batches. All pulp at Milford moves from storage by fork trucks to two special inclined conveyors which carry it to a pair of 20-foot Shartle Hydrapulpers. Stock consistency varies for different grades but averages between six and eight per cent. From the Hydrapulpers the stock moves into tile bleachers and over an Oliver 8x6 washer. Beater equipment is Shartle and there are three Smith and Winchester jordans ahead of the beater chest and three ahead of the machine chest, all driven by GE motors. Stock handling equipment includes a Sveen-Pedersen Flotation Saveall for recovering fibers and a Wallace & Tiernan chlorinator.

At the finishing end of the Milford machine improvements, three new giant supercalenders have been installed. One is an 84-inch calender built by Rudison Engineering, and two are 96-inch Appleton Machine Co. supercalender stacks with hydraulic-controlled pressure.

The Appleton machine stacks were designed and developed specifically for glassine and are the widest and fastest glassine stacks known.

Mechanical wind and unwind tensions are adjustable to suit the operator's requirements on these Appleton Machine Co. stacks. The rigid frames are welded steel employing a box type construction and present a modern streamlined appearance. All auxiliary rolls such as fly and carrying rolls are anti-friction mounted and dynamic balanced to the maximum speed. Ladders and crosswalks are arranged to provide an easy operation.

Power

The new boiler plant at Milford increases steam capacity approximately 30%, and this is one of the four major improvements at the mill. Milford burns mostly local pulverized anthracite. The new pulverizer and air heater are Foster-Wheeler design and construction. The boiler and economizer are Babcock and Wilcox with M. H. Detrick furnishing the suspending walls. Capacity is 100,000 pounds of steam per hour.

Of interest to the industry, since many mills face similar problems, is Riegel's initiation of a 4160-volt distribution system. Unit substations are provided to drop the 4160-volt distribution potential to 440 volts for utilization.

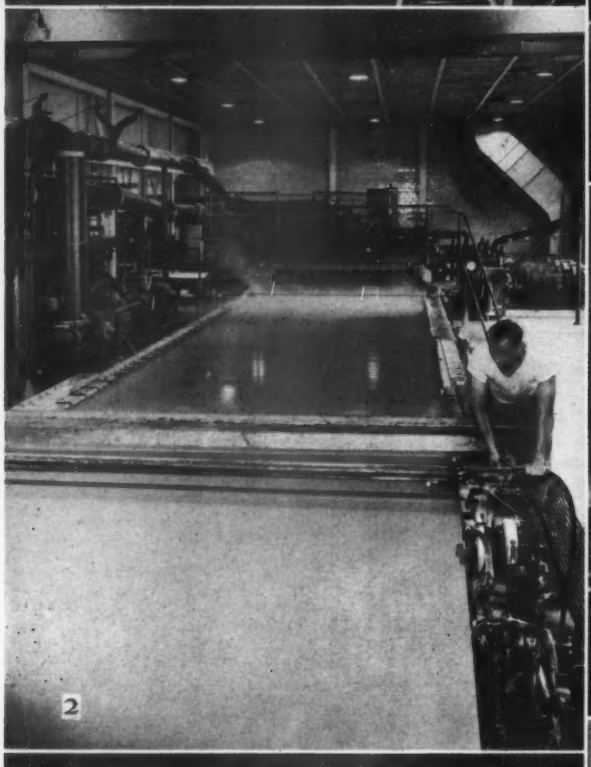
A new GE 5000 kw turbine generator of single automatic extraction back-pressure type has been installed. The generator is rated at 6250 kwa, 4160-volts, three-phase, 60-cycle, and is separately excited.

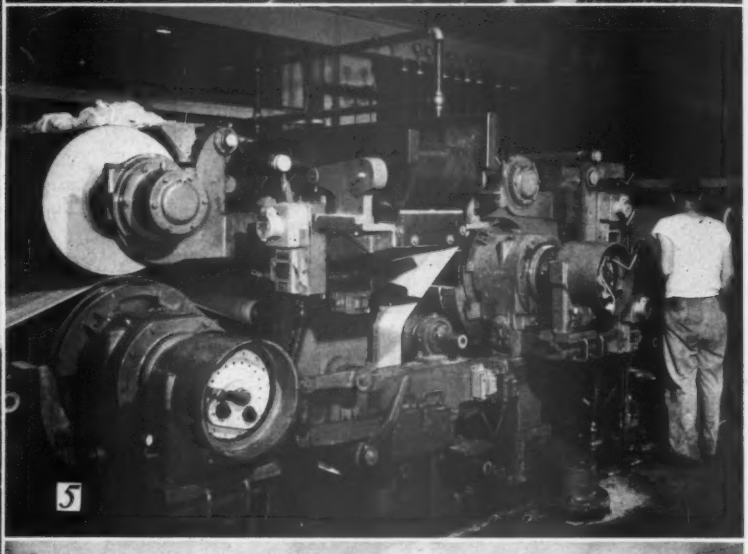
The new coal conveying system, supplied by Robins Conveyor Div., Hewitt-Robins, Inc., Passaic, N. J., consists of thirteen 20-inch rubber belts and has a rated capacity of 100 tons per hour. The coal unloading and elevating equipment is of the skip-hoist type and was furnished by Beaumont Birch. The coal storage system includes a drag scraper for storage and reclaiming which makes for considerable flexibility in fuel handling. The conveyor system is approximately 1400 feet in length running overhead from the unloading and storage area to the boiler plant.

Construction Features

Housing for these improvements is of latest design and construction. The boiler house is steel framed with concrete roof and operating floor. Siding is the H. H. Robertson Co.'s "Galbestos" of corrugated iron sheeting and asphalt. The new turbine generator installation is in an existing building which has been extended with brick, steel and concrete. The conveyor housing has concrete floor and

THIS AIR VIEW OF MILFORD MILL of Riegel Paper Corp., shows main plant buildings and at the outer edges of the picture, homes of employes. A garden can be seen in the lower left corner.





ON OPPOSITE PAGE IS SHOWN NEW EQUIPMENT IN THE RIEGEL PAPER CORP. MILLS:

1. New paper machine building at Milford, N. J.
2. Wet end of new Rich Barton glassine machine with 112-inch wire. Headbox is of Riegel and Rice Barton design with a Valley Iron Works slice. This is at Milford. Bird Machine Co. screen and two Shartle Centraps are in background of this picture.
3. Refining equipment in Riegel Corp.'s Warren Mill includes this Hermann Claflin Refiner supplied by The Hermann Manufacturing Co. of Lancaster, Ohio.
4. Here are Downingtown Mfg. Co. type suction rolls on the new Milford glassine machine.
5. Press rolls on the new machine.
6. New coal conveyor supplied by Robins Conveyor Div. of Hewitt-Robins, Inc., Passaic, N.J. System consists of thirteen 20-inch rubber belts with rated capacity of 110 tons per hour.
7. At Milford, this Sveen-Pedersen Flotation Saveall for recovering fibers. It was supplied by Bulkley, Dunton Pulp Co., Inc., of New York.

corrugated asbestos-cement siding and roofing.

Plant Improvements

The improvements in the bleach plant at the Warren mill include a 20-foot 400-hp. Dilts Hydrapulper, two chlorinators with Shartle vertical agitators, a 6x6 Oliver filter, two bleachers and two causticizers, and two No. 20 Shartle circulators. Refining equipment in this layout consists of two Miami No. 2 jordans and a Claflin refiner, as well as Noble and Wood refiners.

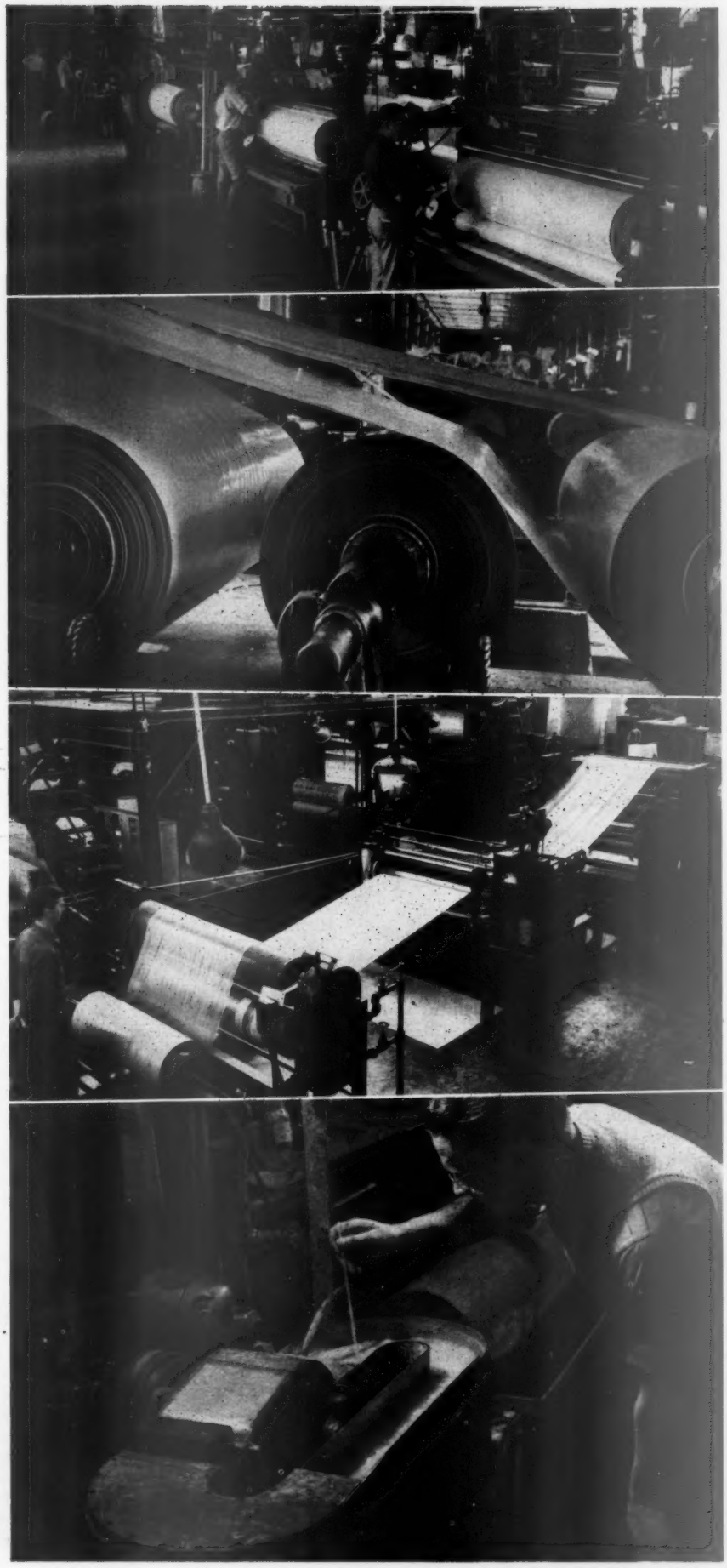
At the Milford plant a new Lobdell grinder has been purchased that will handle rolls up to 188 inches face by 32 inches diameter. The grinder will be located in a new separate building 108 ft. by 25 ft. made of steel and brick which is now under construction and which will also serve as a roll storage building.

A new intake at the Delaware River for the Milford mill water supply with a Dorr Clarifier and Floculator designed to handle 18,000,000 gallons of water per day is also under construction.

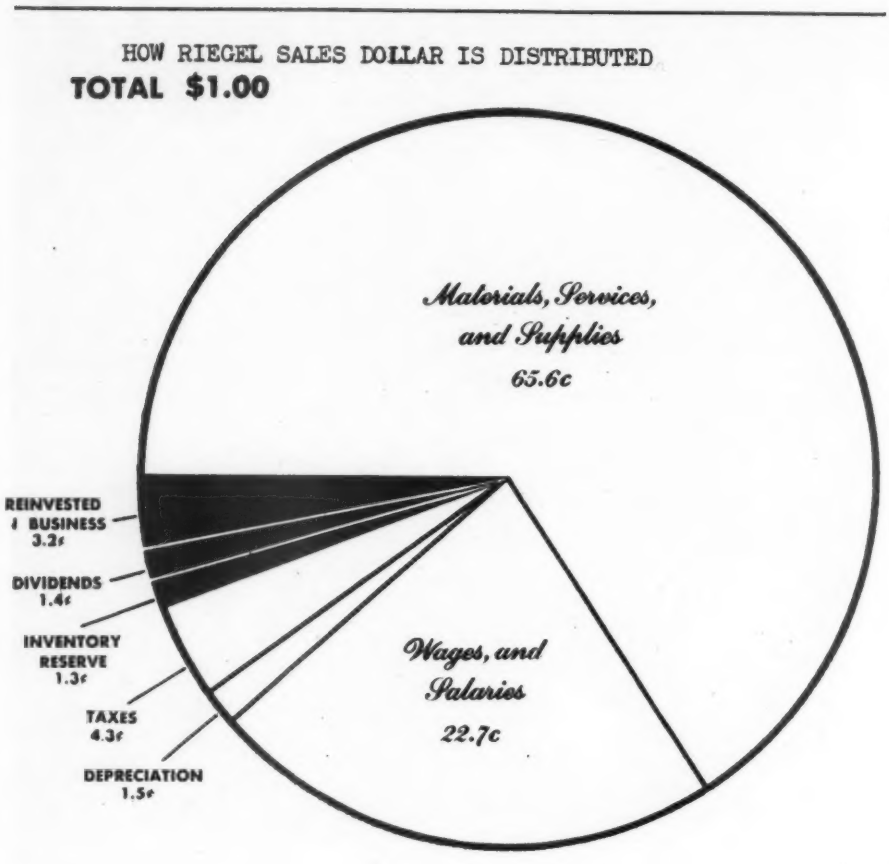
May Build Pulp Mill

In announcing the $3,000,000 in improvements to employes and shareholders, President Riegel said, "The Milford mill is already the largest glassine plant in the world, and yet we have more orders than we can fill. We also believe that new developments, particularly in the food field, will increase the use of plain, waxed, coated and laminated glassine papers for packaging. It is important for each of us for the company to maintain its leadership and move ahead."

Riegel Paper Corp. is looking beyond its present moves. Mindful of the world pulp situation, the company recently acquired 150,000 acres of timberland in North Carolina, and future plans may include a



PAPER OPERATIONS AT RIEGEL: Top—A row of winders in the finishing department of the Milford plant. Second Scene—One of Riegel's many multiple operations—eight rolls on a single sheet cutter. Third—Printing and waxing combination in one operation. Bottom—Miniature tugboat beater used in lab for testing glassine pulps.



FACTS ABOUT RIEGEL

Riegel Paper Corp. operates these divisions:
Milford Mill, Milford, N.J. (9 machines).
Warren Mill, Warren Glen, N.J. (2 machines).
Hughesville Mill, Hughesville, N.J. (1 machine).
Riegelsville Mill, Riegelsville, N.J. (1 machine).

Directors are Paul R. Bachman, George L. Bidwell, German H. H. Emory, Walker Hamilton, Fred I. Jacoby, Aaron P. Mitchell, William H. Radebaugh, John L. Riegel and Theodore Riegel.

John L. Riegel is president and treasurer; Walker Hamilton is executive vice president and general manager; Aaron P. Mitchell is vice president and secretary; Theodore Riegel is assistant secretary; German H. H. Emory and Donald K. Evans are assistant treasurers and Robert H. Evans is assistant secretary and assistant treasurer.

	1947	1946
Tons Produced	89,799	85,992
Net Sales	$25,231,471	$20,085,763
Net Income	$ 1,465,329	$ 1,105,135
Dividends per Share	$1.40	$1.20
Number of Employes	1,676	1,695
Investment to Maintain Job for Each Employe	$6,826	$6,279
Working Capital	$ 4,280,391	$ 4,405,158
Number of Stockholders	509	498

pulp mill at Acme, N. C., or some other southern site. With its wood supply, it can become a completely integrated operation.

HISTORY OF RIEGEL'S GROWTH

Glassine manufacture has shown amazing growth in the U. S. since early in the century and an improvement and expansion which increases Riegel's production by 20% is an important development in the North American paper industry. Riegel has more than once made history in the industry. Its own record began in 1862 when the firm of John L. Riegel and Son began making paper in a gristmill at Finesville, N. J. Since then the organization has grown steadily to the present operation of four mills.

Benjamin Riegel started the family tradition in manufacturing. An early settler in the Delaware Valley, he ran a sawmill, an oilmill and a gristmill. It was his son, John Leidy Riegel, who converted the family gristmill at Finesville to papermaking and who started the firm of John L. Riegel and Son. In 1867, he took his son Benjamin, named for his grandfather, into partnership, a year after moving the papermaking equipment to Riegelsville where they made manila paper.

In 1873, John Leidy Riegel and several associates formed another paper concern, Warren Manufacturing Co., with a mill at nearby Warren Glen. The mill on the Hunterdon County bank of the Musconetcong River still makes a famous line of manila and similar papers. In 1891, Warren Manufacturing Co. built a mill at Hughesville.

John S. Riegel, younger brother of Benjamin Riegel, recommended to his Warren associates the purchase of the William Marshall Paper Co. in Brooklyn in 1900. But it was found that the water was unsuitable for the types of paper they wanted to make, so the Brooklyn equipment was moved to Milford where production started in 1908.

It was two years later that John S. Riegel saw the possibilities in glassine which had been developed in Germany as a wrap for food and other products. He made a trip to Germany for equipment and technical data and later sent George L. Bidwell abroad to study the process in detail. Milford was producing glassine as early as 1910. Two years later the Riegelsville mill, operated for John L. Riegel and Son, was bought by Warren.

This John Riegel was asked to assist in the reorganization of the Union Bag & Paper Corp. and was president of that company at his death in 1916. During his presidency of the Warren firm, its business had increased five-fold. George Bidwell is now retired. The Lamont Bidwell who is manager of the Milford mill is his son. The elder Bidwell invented a number of items of equipment in use by Riegel mills today.

It was in 1930 that the name of the Warren company was changed to Riegel Paper Corp.

The company's record through several depressions, including the 1929 debacle, shows only a very moderate drop in net sales and then only for brief periods. When times are bad, it is Riegel's policy to spread employment as far and evenly as possible. Like the management, many employes are the third and fourth generation in the Delaware Valley.

Riegel is one of the few paper mills in the U. S. where all mill employes have membership in a club maintained by the company. This is Riegel Ridge with a fine wood and stone clubhouse overlooking a valley and with complete facilities for both indoor and outdoor sports and relaxation. A big television set has recently been installed.

"Share-of-Production" Pay Plan Pays Off

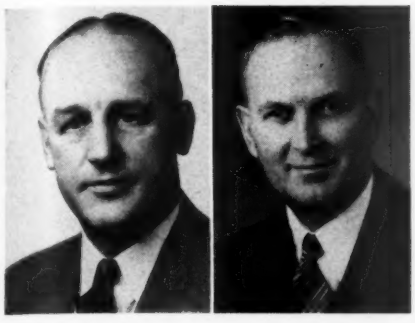
About a year ago the Continental Paper Co., Ridgefield Park, N. J., entered into a new type of labor contract which was described fully in the October 1947 issue of **PULP & PAPER**. It was known as the "Rucker Share-of-Production Pay Plan." Now William J. Alford, 3rd, president of Continental, has reported on some of the results for the first 12 months of the plan.

The company has paid $325,222 to 390 hourly employes. Half the amount was paid in cash and the balance to the employees' pension and retirement fund. The share of production averaged 35 cents an hour in addition to the average base pay of $1.38 an hour.

This, said Mr. Alford, gave the average employe, who earns a base pay of over $70 a week, an additional $425 in cash for the twelve months period, and an equal amount was paid to the Connecticut General Life Insurance Co. for his pension and retirement fund.

NEKOOSA No. 4 REBUILT

Improvements at Wisconsin Mill



CHARLES H. REESE (left), Manager of Manufacturing of Nekoosa-Edwards Paper Co., and R. A. NUGENT, Manufacturing Supt. of the Nekoosa Mill, were chiefly responsible for rebuilding and modernization of Nekoosa-Edwards Paper Co.'s No. 4 machine at Nekoosa, Wis.

A completely rebuilt and remodeled No. 4 paper machine at the Nekoosa, Wis., mill of Nekoosa-Edwards Paper Co. is now turning out fine printing papers of improved quality and printability. Mixed furnishes are used. Reason for the work: To increase the machine's range of products. A new bleach plant was recently built at Nekoosa. Increased drying capacity has been achieved in the main section of dryers by the installation of additional dryers. A size press has been added to the machine to permit the manufacture of surface sized fine papers. A second dryer section has been installed after the size press for the purpose of drying the paper after the tub-sizing treatment.

Beloit Iron Works remodeled this No. 4 machine, which trims 110 inches wide and now has capacity for production of about 40 to 45 tons in 24 hours.

The calender stack at the end of No. 4 machine has been rebuilt and the overall length of the machine has been increased by approximately 60 feet. Beloit supplied new equipment on the machine, including new dryer rolls, suction press, etc. A modern Ross Engineering Corp. ventilating hood is positioned over the new dryer section. Rope carriers are now provided for carrying the paper through the main dryer section.

In addition to the above additions and improvements, a bank of 13 Vortraps, supplied by Nichols Engineering Corp., has been installed along the back side of the wet end of the machine for stock cleaning purposes. This installation alone is accounting for a great improvement in the cleaniness and quality of the papers produced on the machine.

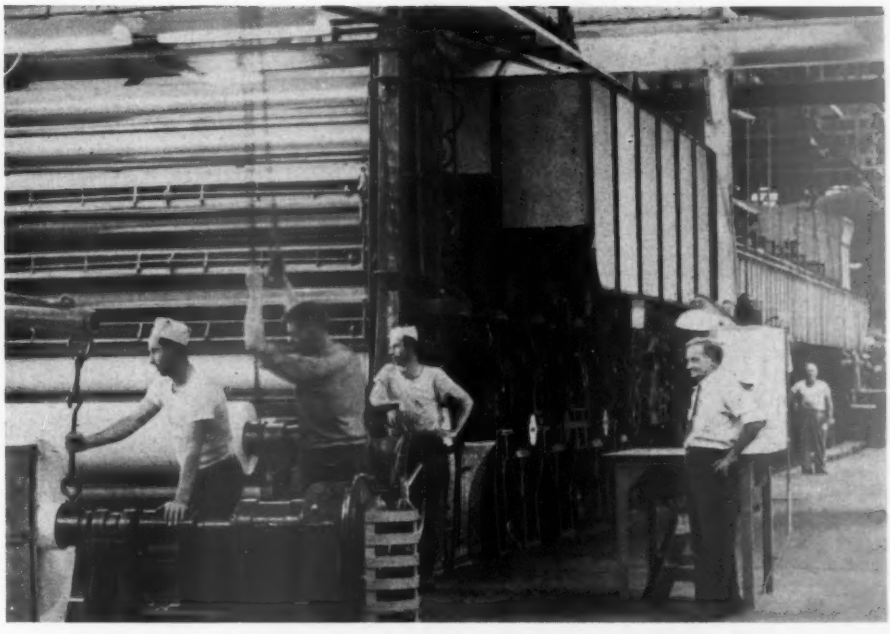
Drying in each section of No. 4 is now controlled by a modern moisture control unit developed by Frederick C. Stamm of Lockport, N. Y.

Additional plans for further improvement of the machine call for a new rubber covered spiral drilled suction press, a center wind drum reel, and a new 120 inch trim winder from Cameron Machine Co.—Camachine No. 18 with constant tension device. These improvements will be effected step by step in order not to result in a material loss of machine time.

Rebuilding of the Fourdrinier by the Beloit Iron Works is also being planned.

The entire changeover thus far was completed in nine working days, during which the machine was idle. Prior to the rebuilding operation, the first section of dryers had been completely resurfaced and rebalanced.

Since No. 4 machine has been rebuilt, surface-sized sheets with improved printing characteristics can now be produced making the rebuilding and remodeling an important step in the Nekoosa-Edwards modernization and expansion program.



No. 4 MACHINE AT NEKOOSA, WIS., MILL of Nekoosa-Edwards Paper Co.—110 inches trim—rebuilt by Beloit Iron Works to increase the machine's range of products. New Ross Engineering hood, Stamm steam controls, Nichols Engineering Vortraps are among features of machine besides parts built by Beloit.

Pacific Coast Alder Pulp As An "Additive" Material

The Pacific Northwest Forest and Range Experiment Station says in its recent annual report that the use of Pacific Coast alder for sulfate pulp has been investigated by the Forest Products Laboratory and at least three industrial concerns. The alder would be utilized largely as an additive material in the manufacture of specialized products extending from high-grade book papers to insulating board, it says, adding, that preliminary results are "very encouraging."

Changes at Memphis Mill

A roof section of the machine room at the Kimberly-Clark mill in Memphis, Tenn., was raised this summer to permit installation of drying equipment.

U. S. engineers have altered the course of the Wolf River for flood protection. As a result the property line of this newest K-C sulfate pulp and wadding mill has been altered.

Life on West Linn Paper Reaching Readers Friday

Gradually the production of Life magazine for western readers on machine coated paper produced at West Linn, Ore., division of Crown Z is making it possible to match delivery dates of that magazine to eastern readers.

Expansion of printing facilities at Pacific Press, Los Angeles, now delivers the weekly to all West Coast readers on Friday. The printing order at the Los Angeles plant was recently doubled in volume.

MARKET PULP INVENTORY at U. S. paper and board mills reached the highest post-war level July 31, according to figures released by the Bureau of Census. The pulp inventory, by grade, at partially integrated and non-integrated mills totaled 560,676 tons as compared with 492,515 on Jan. 1. These figures do not include inventories of purchased market pulp held by wholly integrated paper mills which, on July 31, totaled 27,486 tons.

Coyoacan's Paper Mill

IT'S HOUSED IN CONVENT WALLS

Colorful shrines of saints, each with its little figure a foot or two high and in a frame with flowers and lights burning constantly, are on the walls in each of the main departments of the groundwood and paper mills of Fabrica de Papel "Coyoacan," S. A.

There's Santa Lucia, the patron saint of papermakers, in one machine room. Our Lady of Guadaloupe, the patron saint of the Americas, in colorful dress, is on the wall overlooking another machine room.

The Coyoacan mills in the town of that name, which is one of the very oldest towns in all Mexico, are in buildings which once housed a nunnery. Whenever they have wanted to break out a wall for a new machine or a change in the operation at Coyoacan, the engineers have found it a mighty difficult job. The walls of the 250-year-old convent are made of basalt lava stone three feet thick. Modern engineers could hardly build a more solid wall or more fire-proof. This same basalt lava stone from Mexico has gone into some of the finest beaters in any American paper mills and has been shipped to the United States for that purpose.

It seems fitting to start off this story about **PULP & PAPER** editor's recent visit to the Coyoacan mills by noting that it is housed in convent walls and by mention of the saints' wall shrines because the atmosphere of religion about it seems to be characteristic and important.

The town of Coyoacan is a suburb of Mexico City, just about seven miles south of the center of the city—but it is much older than the Mexican metropolis. Hernando Cortez, the first great Spanish conquistadore, built a church here and a home for himself and his Tabasco Indian paramour, the reportedly beautiful Princess Malinche. Her home and church and the paper and pulp mills are all together on the public square of Coyoacan, the ornate Iglesia la Conchita stands in the midst of flowering shrubs and tropical trees. Her pink stone house is on one side of the church and the mills on the other.

The old convent walls of Coyoacan housed livestock shows back in the regime of President Pirfirio Diaz and they first became the walls of a paper mill in 1928 when an enterprising Dutchman immigrant in Mexico put together what is now the No. 1 machine, 55 inches wide, to make a paperboard.

Two years later, in 1930, the property was bought by Don Tomas Mier, then a very young but ambitious paper importer and salesman. Today he has three paper machines and a groundwood mill and he is constantly making improvements and modernizing his operations. Today he is

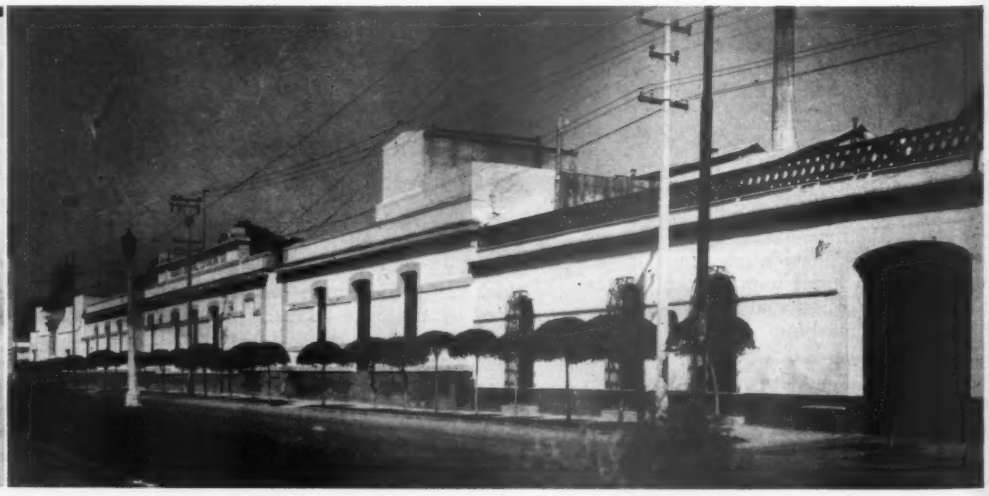
Left to right: E. WALTER SKOGLUND, Swedish consultant for Fabrica de Papel "Coyoacan," S. A., of Coyoacan, Mexico.

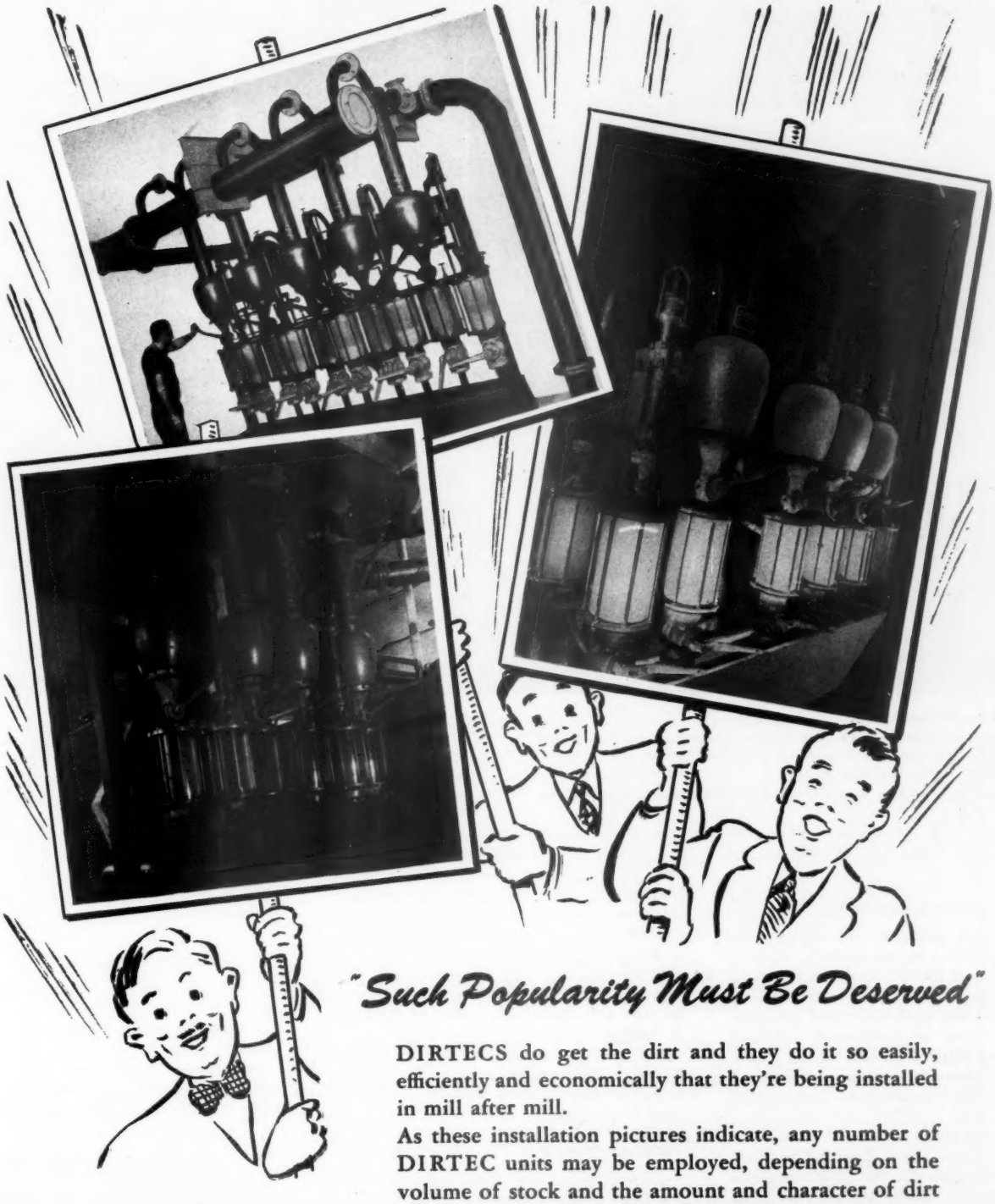
DON TOMAS MIER, Spanish-born President and General Mgr. of Fabrica de Papel "Coyoacan," who bought the mill property in 1930 and greatly expanded it.

LOUIS LOMBO, Assistant to the President and Assistant General Manager.

AT LEFT, one of the shrines of saints which are kept lighted in every machine room and department at the Coyoacan mill in Mexico. The Patron Saint of Papermakers is Santa Lucia. Shrines in Mexican mills may also be of the Virgin Mary and of other saints, too. This interior picture was taken with Leica camera without flash by PULP & PAPER editor.

AT RIGHT, a general view of the front side of the Coyoacan mill. These 250-year-old three-foot thick basalt lava walls once housed a convent. Later it was the scene of stock shows.





"Such Popularity Must Be Deserved"

DIRTECS do get the dirt and they do it so easily, efficiently and economically that they're being installed in mill after mill.

As these installation pictures indicate, any number of DIRTEC units may be employed, depending on the volume of stock and the amount and character of dirt it contains. DIRTECS are exceedingly easy and inexpensive to install, operate and maintain.

Ask us to show you what they can do for you

BIRD MACHINE COMPANY

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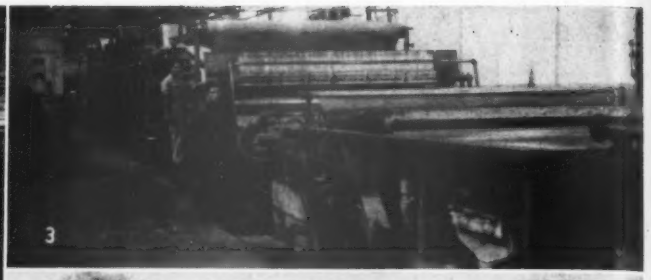

MILL SCENES AT COYOACAN

1—No. 3 machine, 130-inches wide. This machine formerly belonged to Everett Pulp & Paper Co. and was moved to Mexico from West Tacoma, Wn. in 1941.

2—Machine shop crew at Coyoacan (Mexico).

3—Wet end of No. 3 machine. A new Shartle-Dilts stock system is ahead of this machine.

4—Pulpwood stacked outside mill. It is cut by farmers and Indians at over 9,000 ft. elevation. (Note basket lunches of 2 workmen, with fancy embroidered scarves made by the wives.)

5—Two 4-pocket grinders installed in new groundwood mill built during war.

46 years old, still a bachelor, and one of the most highly respected business men of Mexico.

Now One of Principal Mills

His mill ranks as one of the four largest operations in the country, making 35 to 40 tons a day of paper and 12 tons daily of groundwood. Eight to ten tons of waste paper are used daily and approximately 15 tons of purchased cellulose pulps. When **PULP & PAPER** visited Coyoacan there were substantial supplies of bleached sulfite pulps from the United States on hand.

Tomas Mier came to Mexico from Santander, Northern Spain. He has the black hair, smooth, light skin but pink complexion and stocky build of the northern Spaniard. He also has their openly frank and genial manner as well as their aggressiveness. He apparently lives "the Golden Rule" as his many friends in Mexico will say, and there is a saying in Spanish that "his heart is too big for his chest." As an industrialist, his labor relations seem to be ideal and there has never been a strike in his mills which now employ some 260 workers.

A bachelor—he has two young nephews in the mill, learning from scratch.

Chief assistants to Sr. Mier are Louis Lombo, assistant to the president and assistant general manager and also Spanish-born, and E. Walter Skoglund, a Swede who came to Mexico with his father many years ago. Mr. Skoglund is engineer, superintendent and consultant to Sr. Mier and he also built his own little eight ton-a-day carton mill at Ixtapalapa, five miles South of Mexico City. He was in the process of turning over this new mill to new owners at a profit when visited by **PULP & PAPER**. His father, John Victor Skoglund, recently retired as sulfite pulping manager at the big San Rafael mill at the age of 73 and returned to his native Sundvaal in Sweden.

Mexican Ingenuity

Ingenuity has not been wanting among the staff of the Coyoacan mills. For instance, just recently they installed a new Maxson paper cutter and Erie layboy after waiting eight years for this equipment. But meanwhile they built their own similiar equipment, a trim-looking machine which is still being used on one of the older machines while the new cutter and layboy serve the new No. 3.

We saw other instances of ingenuity where the differential from an old Mack truck is being used to drive the calender stack on No. 2 machine and it is doing a nice job if it.

"The Mexican mechanics are very good —they are 'curioso' ", explained Mr. Skoglund, which means they will always "have a try" and they never will admit they can't do a job. And they learn very quickly.

Description of Machines

On the 55-inch No. 1 machine at Coyoacan, a set of 15 new dryers were installed this year. These are 36 inches in diameter with 70 inch faces, mostly Sandy Hill rolls and used, but in good shape and they were ground and refurbished by the Coyoacan staff. They will replace 9 old 60-inch dryers.

No. 2 machine is 80 inches wide. It is a second hand machine which came from New England in 1934. It is used mostly to make bond and onion skin. Colors are usually run on this machine which is served by four Swiss-made beaters, one jordan and two Swedish screens. The screens made in Sweden have been doing very well in several Mexican mills visited, but the trend is now toward more equipment of American manufacture. No. 2 has an overhead drive with a lot of belting back of the machine. This old-fashionad equipment was on the way out, with Sr. Mier planning the installation of a new direct drive.

Bids also had been received for new

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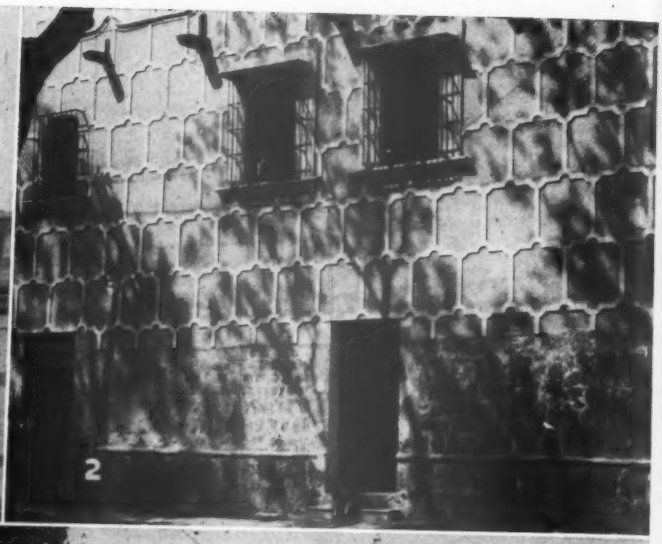

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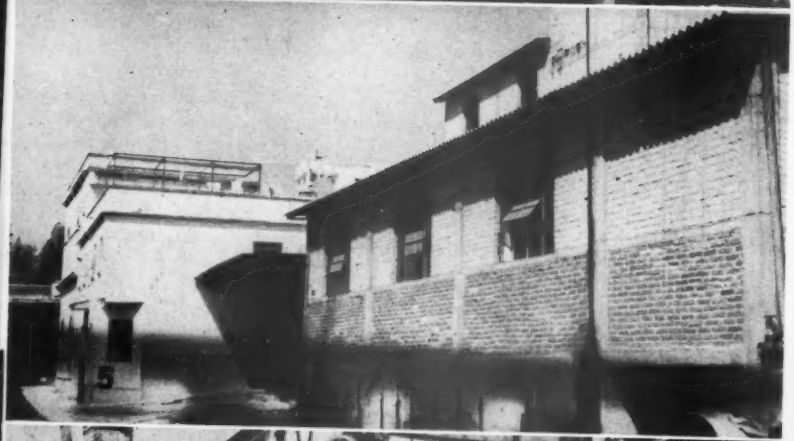

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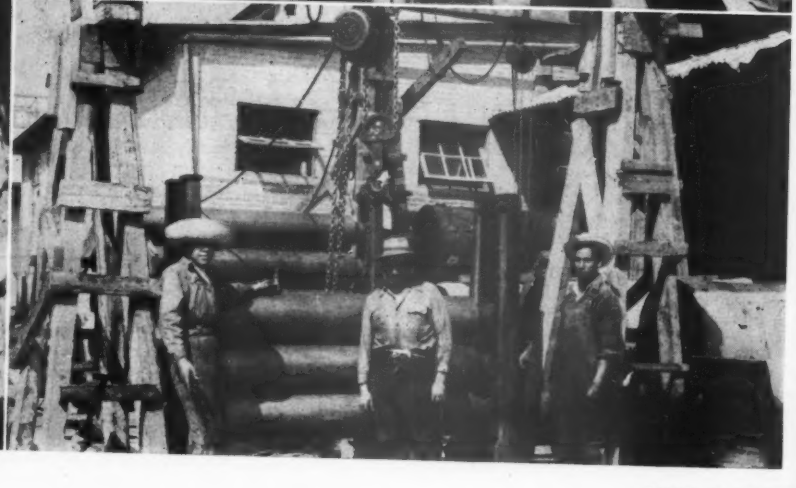


FABRICA DE PAPEL "COYOACAN" — The Coyoacan Paper Mill—is located on the main square of that town a few miles south of Mexico City. The pictures on opposite page were taken on 35 mm. film by a PULP & PAPER Editor while visiting the mill.

1. **Main entrance of the mill. This structure formerly was a nunnery.**
2. **Pink stone house across from the mill. This house built by Cortez for his Indian Princess paramour.**
3. **Iglesia la Conchita, church built by Cortez, which stands in center of town square, directly opposite mill entrance.**
4. **Another view of the ancient church, also built for the Indian Princess.**
5. **Private apartment homes of executives are in the white building, directly adjoining the mill building at right in this picture. Loading platform for the mill is between the two buildings.**
6. **The Towmotor Co. of Cleveland, O., made this fork lift truck for the Coyoacan mill. Baled pulp on the truck is from a Puget Sound pulp mill.**
7. **Sandy Hill Iron & Brass Works of Hudson Falls, N. Y., supplied these rolls which are being ground and refurbished by the Coyoacan staff for installation on No. 1 machine at the Mexican mill.**

direct drive of modern style for the 124-inch No. 3 machine and for a 200 hp. turbine.

The present drive on this machine is from the basement and the new drive will be on machine floor level and a lot of belting will be eliminated.

The No. 3 machine at Coyoacan has an interesting history. It is excellently maintained Black-Clawson machine which came from the West Tacoma, Wash., mill of Everett Pulp & Paper Co. It was sold during the long period when that Washington state mill was idle. Only last year it started up again under new owners with the remaining machine on newsprint.

Sr. Mier went to Tacoma to see the machine in August, 1941. The next month he sent his friend, Walter Skoglund, to see it and complete the purchase and handle shipment. By November, 1941, the machine was at Coyoacan, which may be something of a record for a fast deal and delivery— at least something that would be quite unusual these days. And it is a case that the lie to the common charge that Mexican business men move slowly.

The No. 3 machine is exactly the same at it was in West Tacoma except than an American screen at the head of it was removed and replaced by a Swedish make to give added capacity. The new Shartle-Dilts system for continuous stock preparation was installed ahead of the machine, also. This consists of a 10-ft. Hydrapulper, two Hydrafiners, and 2 Miami jordans, the stock passing through these instruments in that order to the machine headbox. Sr. Mier was considering adding possibly another modern stock refining machine in the sequence to give even greater versatility to the machine products.

American or Canadian sulfite pulps, Swedish aspen soda pulps, bleached kraft, groundwood and waste paper all go through the Shartle-Dilts system or the beaters and pulp preparation equipment on the other machines, in different quantities and ratios. A Mexican mill has to be versatile—it can't specialize in one or two products in big volume—it has to make all kinds of paper for all kinds of customers.

No. 3 machine makes almost any grade from wrapping to bond paper. Most of the products are good looking, high Mullen, well-formed papers. The finishing department is rather extensive as so many kinds are made. We even saw a kind of poster or handbill newsprint as well as heavy poster paper.

At the same time that No. 3 machine room was added, the groundwood mill was also built. Just as United States entered the war and just in the nick of time, the grinders and other equipment were delivered. The two grinders bearing the mark of Smith & Valley Iron Works, and made in Portland, Ore., (Western Machinery Corp. in Portland now owns the Smith-Valley patents) came from the Tumwater, Wash., mill which since became a brewery.

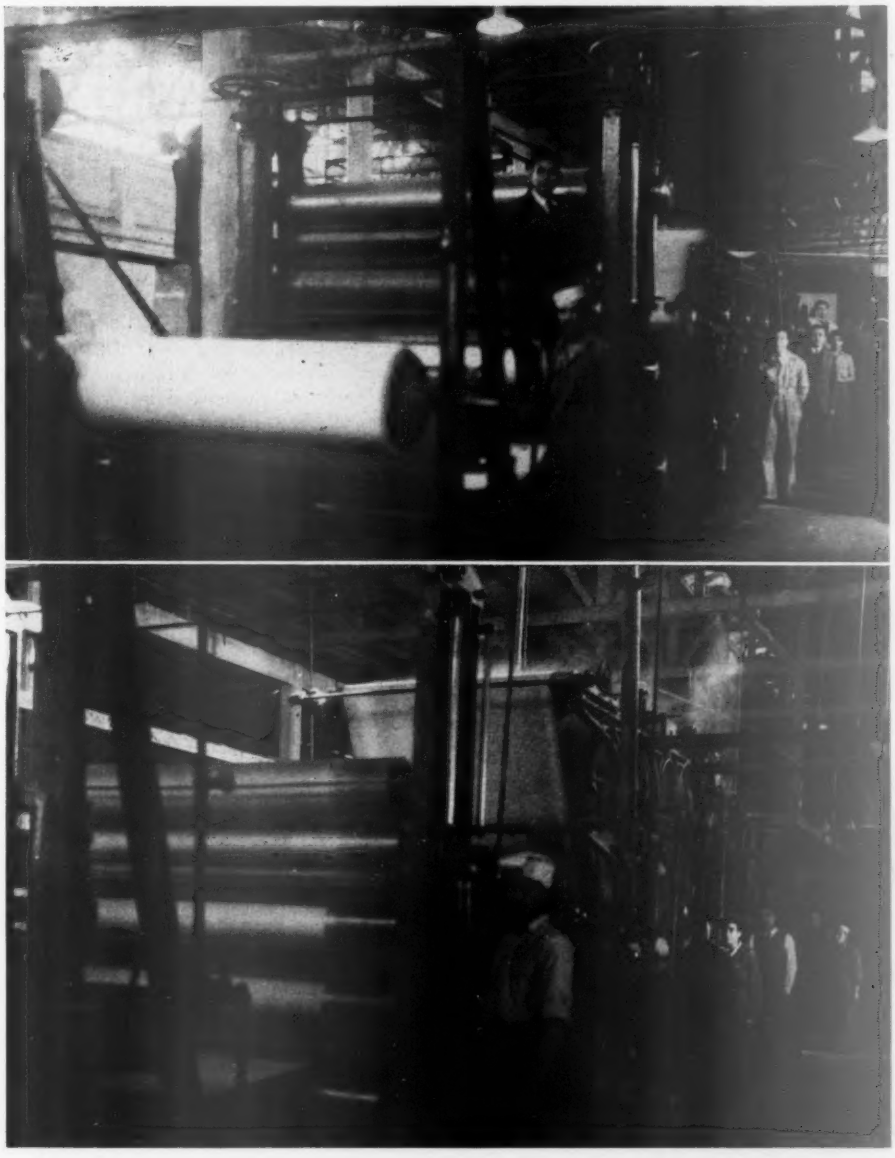
The wood at Coyoacan is spruce of good quality, cut by farmers and Indian cutters and peeled by them and delivered by truck to the mill. It is cut in two-foot lengths for easier handling in the mountains. It comes from 9,000 to 12,000 foot altitudes in an area within 40 to 50 miles south of Mexico City. Sr. Mier said there was ample supply of wood, and under government direction, the reforesting and good husbandry of wood resources is making some progress. The mill apparently only feels a need for keeping at most about 200 tons of this wood in reserve on the mill grounds.

Additions Being Planned

Sr. Mier, who seems to be constantly making plans for improvement and growth of his operations, is now building additional warehouse space and there is possibility of another machine in the future. His properties at Coyoacan now extend over 45,000 square feet of ground.

Power improvements also are planned but these have not yet been formulated. At present the cost of electrical power for the mills purchased from the Mexican

Top, No. 1 machine has a 68-inch wire and 15 new rolls from Sandy Hill Iron & Brass Works have just been installed on this machine. Bottom, No. 2 machine with 90-inch wire width. It came from New England.



PAPER CUTTERS AT COYOACAN. Top—A new Maxson cutter and Erie layboy were recently installed. The Coyoacan mill also built a cutter of its own design. Lower—Finishing and sorting room.

Light & Power Co. amounts to about $10,000 per month.

Like so many other Mexican mills, there are living quarters right on the grounds. Part of one side of the actual mill buildings house four apartments, with attractive porches or patios, trees and flowers. There is also a Spanish style house within the mill walls where Mr. Skoglund and his family formerly lived. Executives of the mills live in the houses and apartments, although Sr. Mier has his home elsewhere.

Sr. Mier speaks only Spanish but he has a young assistant who speaks English and of course, Walter Skoglund also speaks English. Sr. Mier is always at the mill from 8 a.m. to 10 a.m. He may be back in the late afternoon, but he has many other interests. He came to Mexico as a paper salesman and he is still very active in the selling end of the business. In fact, he sells about 80% of his paper products himself and has an office staff of about 35.

In the story of new growth and opportunities for paper manufacturing and marketing in Mexico, Don Tomas Mier and his progressive and alert Coyoacan organization must be reckoned with. They are not going to be left behind in the parade.

BLEACHING WASTE PAPER PULP

Twenty-five tons daily of bleached pulp from waste paper are being produced by the new Manhattan Pulp & Paper Company, Hudson Falls, New York, according to a report from one of **PULP & PAPER'S** field editors. The little mill was formerly an operation owned by Wheeler Paper Corp., but was recently purchased by the new organization and converted from the cold-water deinking process to the hot process using caustic soda and sodium hypochloride. John Reis is president of Manhattan Pulp & Paper, and George Delano, formerly with Wheeler, is superintendent.

Equipment includes Hydrapulper, flat rotary screens, bleach layout, and pulp presses. All grades and types of waste paper are being processed and the owners claim a very high grade of pulp. The present operations, they state, have encouraged them to make plans for additions to the building and equipment which will increase the tonnage materially.

Manhattan Pulp and Paper is connected with the Keystone Brokerage Co., 527 West 29th St., New York, well known waste paper dealers, and also with the Doomsday Press, one of the largest printers of books and magazines in New York. Operations at Hudson Falls was chiefly in connection with Keyston and Doomsday business, but increased tonnage may lead Manhattan into the market.

New No. 8 Machine Starts Up at Powell River

President Harold S. Foley of Powell River Co. and several directors went to Powell River, B. C., Sept. 14 for official start of the company's new No. 8 newsprint machine.

This machine, built by Dominion Engineering Co., is a 2000 FPM unit, and most of the improvements developed in the newsprint industry during the past few years have been incorporated. It is one of the two new newsprint machines going into production this year north of the international boundary—the other being a Dominion Engineering machine at Bowater's mill, Corner Brook, Newfoundland.

Actually, the first roll of paper was produced on Powell River's No. 8 on Sept. 1. One of the machine tenders is Iky Valentine, who was fourth hand on the crew that made the first paper when No. 4 went into production back in 1915.

Slime Control Will Be Topic at Camas Nov. 16

An unusual roundup on the subject of slime control will attract considerable attention to a blue ribbon Pacific Coast TAPPI meeting to be held at Camas, Wash., on Nov. 16.

Dr. Glen King, of Crown Zellerbach's Central Technical and Research Department at Camas, who a few years back presented a prize-winning Shilby award paper on slime control, will be the moderator. Dr. King also will give a paper which will be a comprehensive survey of actual mill results in control efforts. It was just this kind of paper, which called a spade a spade in this knotty problem, that won him the Shilby honors.

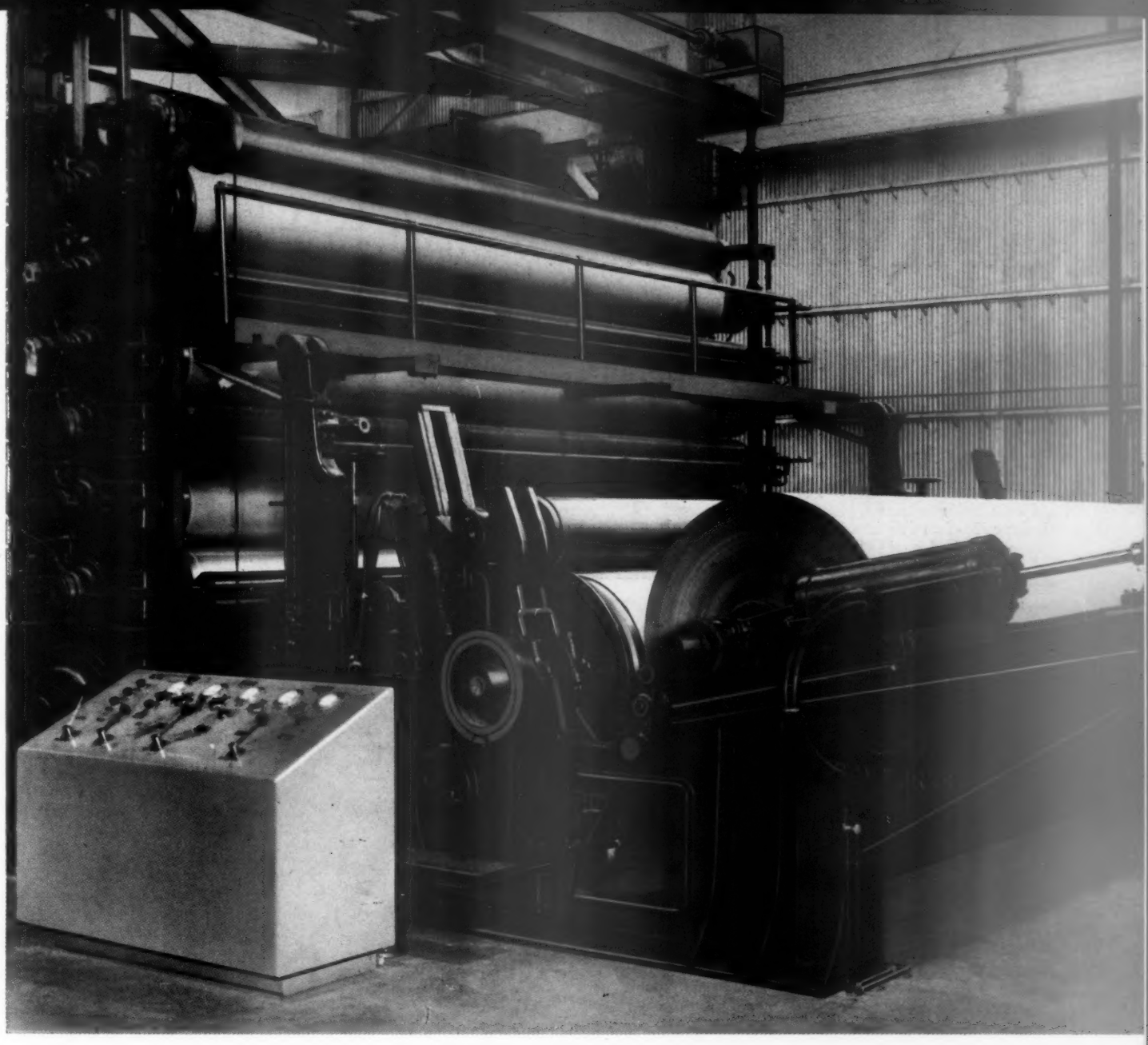
F. A. Soderberg, director of paper service development for General Dyestuff Corp., will discuss the use of organic mercury compounds. Dr. John W. Appling of Buckman Laboratories and two other men, whose official acceptance of the invitation to speak is expected, will complete the panel.

Pacific Coast Supts. To Convene Dec. 3-4

The Pacific Coast Superintendents will hold their annual convention again at the New Washington Hotel in Seattle, Friday and Saturday, Dec. 3 and 4. For the second year, Gerald F. Alcorn, kraft superintendent, Pulp Division, Weyerhaeuser Timber Co., will preside over the meetings as chairman.

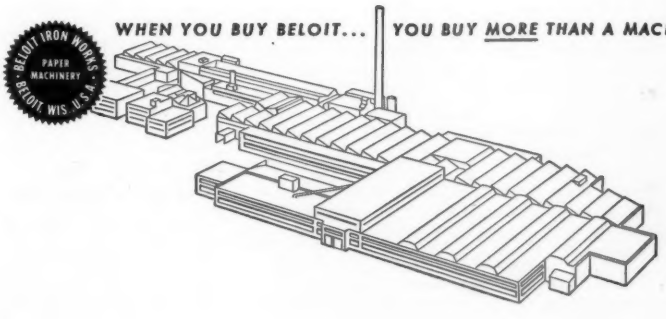
New officers for the coming year will be elected.

NEW RECORDS were set during the first six months of 1948, when the total sales value of all U. S. pulp and paper products amounted to $3,043,000,000, according to the Department of Commerce. This figure is more than $1 billion above that for the first half of 1946, and $234 million higher than the figure for the first six months of last year.



Change reels without paper loss

Extra-heavy construction is a feature of this Beloit patented Horizontal Board Reel for rolls up to 84″ in diameter. Reels can be changed without paper loss. Pressure of roll against reel drum is controlled by air cylinders both in starting and winding positions, assuring uniform hardness of rolls. Since 1858, Beloit equipment has helped to set new production records.—*Beloit Iron Works, Beloit, Wisconsin.*



WHEN YOU BUY BELOIT... YOU BUY MORE THAN A MACHINE!

BELOIT

PAPER MACHINERY

NEW PROCESSES REVEALED

CANADIAN MEETING

Papers based on actual new mill operations and installations in British Columbia and Washington State highlighted the Vancouver, B. C., summer meeting of the Technical Section, Canadian Pulp and Paper Association. It was the first canadian Association meeting of any kind ever held on the Pacific Coast.

The 175 registered delegates—ratio of Canadians to Americans was four to one, with three Newfoundlanders and a Britisher tossed in—had a chance to hear first hand from the operators and technical directors about these important developments:

1. A new magnesia base sulfite pulping system at Weyerhaeuser's Longview, Wash,. operations.

2. Wood salvage and utilization advances in British Columbia.

3. A new type of horizontal chipper at Sorg Pulp Co.

4. A new silo-type chip storage system with free-flowing outlet at the two British Columbia Pulp & Paper Co. mills, including some features introduced at Puget Sound Pulp & Timber Co. and Soundview Pulp Co.

5. How Powell River Co. licked a problem of vibration on a newsprint machine.

6. An elaborate instrument system at the new Bloedel, Stewart & Welch kraft pulp mill at Port Alberni, B. C., and how operators overcame some troubles in starting it up.

7. New pulp preparation and groundwood equipment at Westminster Paper Co.

For readers of **PULP & PAPER**, we have summarized particularly the operations papers and practical discussions in this article. Full text of these papers will be published in the official organ of the Canadian Technical Section.

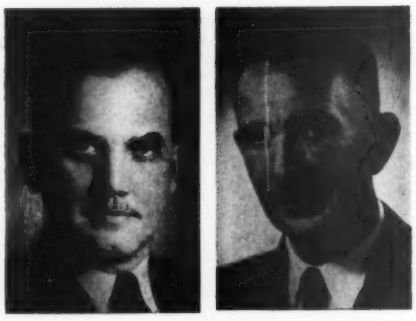
Many of the delegates took trips to mills to see the operations. They not only went to British Columiba mills but they were given a wholehearted welcome at the big United States market pulp mills on Puget Sound and they were shown many new developments in those mills.

Incidentally the mill men in attendance were about equally divided from east and west of the continent. But together these mill men were considerably outnumbered by equipment and supply company representatives in attendance.

F. J. Giffen, assistant to the manager of mills, Canadian International Paper Co., Montreal, and chairman of the section, opened proceedings Sept. 8 and turned the first session over to Henry Ostrowski, technical superintendent of Pacific Mills, Ocean Falls, B. C., and chairman of the one-year old Pacific Coast branch of the section. Various members of the technical section's council — John Buss, assistant manager of production, Provincial Paper Co.; J. A. Franklin, technical director, E. B. Eddy Co.; E. B. Kirby, Price & Pierce, and C. E. Turner, vice president of Building Products, Ltd., presided at other business sessions.

Among the technical papers presented on the first day of the meeting were those of John S. Hart and R. K. Strapp, research associates of the Pulp and Paper Research Institute of Canada, on alkaline pulping studies with respect to Douglas fir and the effect of sulphidity, and of the institute's staff on the electronic dirt counter developed during the past few years.

One of the most interesting events of the meetings was a demonstration of a phonograph-like "electronic dirt counter." This machine was developed by the staff of the Pulp & Paper Research Institute of Canada in Montreal. If it eventually does



F. J. GIFFEN (left), Assistant to the Manager of Mills for the seven Canadian International Paper Co. mills, with headquarters in Montreal, is the Chairman of the Technical Section of the Canadian Industry and he presided at the Vancouver, B. C., meeting.

J. A. YOUNG (right), Vice President, Pacific Mills, Ltd., Vancouver, B. C., who was the dinner speaker, presenting an interesting history of the British Columbia industry and said there is a challenge today to technical men to preserve the profit margin between rising costs and selling prices which are now meeting resistance.

77 MILL MEN, 98 OTHERS, ATTEND

For the first time in its history the Canadian Pulp and Paper Association held a meeting in the Far West—this one a meeting of the Technical Section—and total registration for the three days of sessions and festivities in Vancouver, B. C., was 175.

Here's the breakdown:

139—from Canada, Newfoundland and England.
36—from the United States.
77—from the staffs of pulp and paper companies or their mills.
98—from equipment or supply companies and associations and publications.

As to the pulp and paper company delegates, they were divided as follows:

38—from east of the Rockies.
39—from west of the Rockies.
29—from British Columbia mills.
30—from eastern Canadian provinces.
10—from Washington and Oregon mills.
3—from Newfoundland mills.
3—from New York.
1—from Wisconsin.
1—from England.

As to the delegates from supply and equipment companies, associations and publications, they were divided as follows:

76—from Canada.
22—from the United States.

Farthest-from-home delegate was William Speir of W. P. Evans & Sons, Manchester, Eng. Next were Gerald Penny, manager, and Lyle Lang, sulfite superintendent, from Bowater's Newfoundland mills, in Corner Brook, Newfoundland., and L. W. Dunphy, of Anglo-Newfoundland's mills at Grand Falls, Newfoundland.

Others who traveled "a far piece" to attend, and were registered, included:

Dr. R. H. Ball of New York, assistant to the research vice president of Celanese Corp., and technical coordinator for that company's new mill near Prince Rupert, B. C.; V. H. Emory, mill manager, Fraser Companies, Edmundston, N. S.; L. S. Henry, mill manager, New Brunswick International Paper Co., Dalhousie, N. B.; E. O. Houghton, supt., Restigouche Co., Campbellton, N. B.; Dr. E. C. Jahn, N. Y. State College of Forestry; Dr. Allen C. Hill, formerly at the Gaspesia Sulphite Co. mill in Quebec and now moved to Montmorency Paper Co. in New York; J. C. Benny of B-F-D Co., Ogdensberg, N. Y.; J. W .Hemphill, Johns-Manville Corp., New York; John Chandler, The Bristol Co., Atlanta, Ga.; Ray Harter of New York and Jack Dickson, of Kalamazoo, Mich., both of Vanderbilt; Emil Creutz, American Heat Reclaiming Co., New York; Vernon Tipka, Bird Machine Co., Evanston, Ill.; J. J. Zima. Newsprint Service Bureau, New York, W. A. Chilson, Northern Paper Mills, Green Bay, Wis., and M. Finnan of Hercules Powder Co., Wilmington, Delaware.

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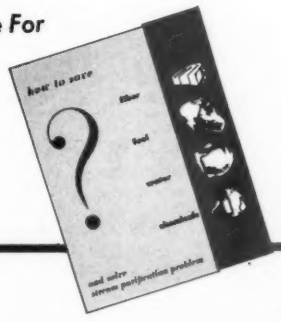

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AMONG THOSE AT CPPA MEETING (Left to right)—Top row, RAYMOND HATCH, retired Research Director, Pulp Div., Weyerhaeuser Timber Co., Longview, Wash., now a consultant (whose talk on magnesia sulfite pulp system was probably high point of interest of the convention); G. E. SEAVOY, Manager and Vice President, Swenson Evaporator Co., Whiting Corp., Harvey, Ill.; HOWARD B. URQUHART, Ass't. Resident Manager, Powell River Co. (who spoke on vibrator problems on newsprint machines); HENRY OSTROWSKI, Technical Supt., Pacific Mills, and Chairman, Technical Section, Western Branch, CPPA; HENRY T. FISHER, Peter Dixon & Son, who came from England to represent the Paper Makers' Association of Great Britain and Ireland; H. E. MEADD, Chief Engineer, Howard Smith Paper Mills, Cornwall, Ont.; R. R. EDWARDS, Pacific Mills, Ltd., Ocean Falls.

Bottom Row—VERNON L. TIPKA, Bird Machinery Co,, Evanston, Ill.; V. H. EMORY, Mill Manager, Fraser Companies, Edmundston, N. B.; A. R. "Fred" WEBB, Pacific Mills; J. A. FRANKLIN, Tecchnical Director, E. B. Eddy Co. (who presided at one of the sessions); F. P. SILVER, Price Bros. Co., Riverbend, Que.; JOHN R. W. GRIEVE, Brown Corp., La Tuque, Que.; DR. R. H. BALL, Ass't. to Technical Vice President, Celanese Corp., New York (who has been coordinating technial phases of Columbia Cellulose Co.'s projeted alpha pulp mill at Port Edward, B. C.).

SNAPPED BY PULP & PAPER IN CANADA (Left to right): Top row, LYLE LANG, Sulfite Supt., Bowater's N.F'd. Mill; MRS. ALBERT S. (Frances) QUINN, wife of the Vice President, Stebbins Engineering Corp., Seattle (she helped with some of the arrangements for entertainment); TOM KETTLES, Canadian Stebbins, Montreal; COLIN MACDONELL, formerly Manager, Disbiens Mill, Lake St. John, Que.; G. D. HUMPHREY, Ass't. Manager, B. C. Pulp & Paper Co.; GERALD PENNY, Mill Manager, Bowater's N.F'd. Co. at Corner Brook, Newfoundland.

Bottom row, ALBERT S. QUINN, Vice Pres., Stebbins Engineering Corp., Seattle; C. K. LOCKWOOD, Shawinigan Chemicals, Montreal; FRED HURTER, head of Stadler, Hurter & Co., engineers of Montreal; F. W. GUERNSEY, Chief, Div. of Wood Utilization, Forest Products Lab., Vancouver (who spoke on wood waste as a source of pulp); CHAS. E. ACKLEY, Paper Mill Supt., Crown-Zellerbach Corp., Port Angeles, Wash.; DOUGLAS JONES, Engineer-Secretary, Technical Section, CPPA.

prove to be a reliable instrument it will be a great boon to the industry, because present methods for making a dirt count are somewhat haphazard and faulty.

R. H. R. Young, manager of manufacturing, Pacific Mills, outlined the wide diversity of the company's products based on the basic output at Ocean Falls of 150 tons of kraft pulp, 150 tons of groundwood pulp and 100 tons of sulfite pulp, daily.

Talk on Magnesia Sulfite System

Raymond S. Hatch, who retired recently was research director of the Pulp Division, Weyerhaeuser Timber Co., in describing the company's process for magnesia base sulfite pulping, made an off-the-record talk which provoked more discussion than any other, indicating the wide interest which this subject has for sulfite mill men in Canada.

In a future issue of **PULP & PAPER**, there will be an article describing the first commercial operation of this magnesia bisulfite system.

Because this plant at the Weyerhaeuser mill in Longview, Wash., is only now getting into operation, Mr. Hatch's talk necessarily had to be based entirely on the pre-war pilot plant results and findings, in which Howard Smith Paper Mills of Canada and Babcock & Wilcox Co., of New York, collaborated.

Mr. Hatch was asked many questions about amounts of MgO and SO_2 recovered, the cooking process, the equipment in digesters and the novel dumping and burning process. As is now well known, under this system, both heat energy and chemicals are the products of the burning of the waste sulfite liquor.

Vibration on News Machine

Howard B. Urquhart, assistant to the resident manager at Powell River Co., on a paper prepared by him and F. R. Riley, general superintendent of paper mills, at Powell River, told how their staff licked a problem of vibration on No. 5 machine. Here is a condensation of the talk:

Mr. Urquhart said that formation of a "chop" in the stock on wire was first noticed when the machine ran 1050 fpm., but the chop magnitude was so small that it was not harmful. However, when the machine was speeded up to the 1150-1200 fpm. range a serious problem was created.

Many attempts were made to eliminate the wave formation and in desperation 14 feet of concrete was added to the screen base which eliminated 70 per cent of the "chop," but over two years the chop came back with increased intensity and it became extremely difficult to run 1200 fpm. The staff decided to make a full-scale study of the situation, and its experience is of significance because of the approach, of the analysis used, the simple tools employed, and the indicated solutions when the study is completed.

The investigation aimed at determining the nature and cause of the wave formation so information could be provided which would remove the periodic thickness and structure variation in the paper which would permit higher machine speeds to be maintained.

Examination of the paper at the winder showed parallel wavy bands, one to two inches wide, of higher translucency than the rest of the paper, running across the sheet at right angles to the machine direction. The average distance between bands was 10 1/2 inches with a machine speed of 1196 fpm. Paper thickness variation was of the order of 10 to 15 per cent and the low figures were mainly in the translucent area.

Investigation of the different possible types of wave formation showed that the existing condition must be due to a periodic variation of the velocity of flow through the slice, and the amount of chop would depend mainly on the magnitude of this variation. The conditions encountered indicated that if stock was slow draining the effect was more pronounced than it was fast draining. There would be a freeness at a given speed and speed variation at which the effect was most pronounced. The amount of long fraction would also effect the formation of the waves since the larger the long fraction the more restriction on the maximum variation in thickness which might be reached. Summing up, the chop was a pseudo wave motion caused by a periodic pulsation of flow through the slice. It was built up in time by the differential action of the velocity of the stock relative to the slice.

In general terms, the variation of velocity through the slice could be caused by an influence wholly in the head box, or by an influence outside the head box. If the source lay in the head box, it must depend on the geometry and structure of the head box. Any fundamental alteration of the structure or the removal or addition of vibrating [illegible] have an effect on the wave forma[illegible] concluded that the influence lay [illegible] head box and that the vibrating m[illegible] tremely large.

Frequency of the vibration and [illegible] characteristics having been determ[illegible]

necessary to make frequency measurements to determine the source and transmission path and for this purpose a resonator was made of a variable steel wire 1/16-inch in diameter.

The most obvious source appeared to be the flat tailings screen. Conclusive evidence was produced that the vibrating cylinder screens acted as the generator which caused the formation on the wire. The screens were individually driven by induction motors, the speeds of which might vary slightly, and the variation in phase of the 5th harmonic output gave rise to the variation in amplitude of the wave formation on the wire. The only forces which could cause vibrations were internal forces and impulses resulting therefrom. All other forces were short circuited in the structure of the individual screen.

It was determined that the transmitter must be the floor since it was the only structure stiff enough to transmit, and it was also the only structure rigidly attached to the head box. The head box was the final step in the transmission of vibrations to the stock.

Past history showed that the structure of the head box was not the resonator, which in turn implied that the head box was "driven" by the floor and the velocity pulsation was caused by the reaction pressure heads, which were caused by the inertia of the water. For a given amplitude of vibration these heads were proportional to stiffness parameters of the box and there would be a combination of stiffness and mass parameters which would enhance the wave formation. When a bosy is vibrating at resonant frequency the energy of the vibration is used up only in the creation of heat. If some oscillating force of that frequency causes the vibration, then the vibration will build up until all the force is dissipated in heat. Heat, or friction that generates heat, is the only way that energy can be taken out of a vibrating system.

In any rectification, concluded Mr. Urquhart, the following ideas are invariant: a. External inertial forces generated in the cylinder screen structures should be balanced out as far as practicable. b. The floor transmission should be minimized by anti-resonant and friction absorbing structures, or by direct cuts across the lines of transmission. c. The head box structure should be made as flimsy as is tolerable and the coupling of the head box to the floor should be as light as possible. In practice, the screens were balanced out by using one motor to drive two opposed screens through suitable reduction units. The two pairs were then balanced by means of a jaw clutch which allows the balancing point to be chosen. This step reduces the chop formation until the machine speed is no longer limited by it, and the machine is currently running in excess of 1275 fpm. The second step, which is to rubber-mount the screen platform, has not been carried out yet because the rubber has not been delivered.

PARTICIPANTS AT CANADIAN MEET (Left to right): Top row, ROY OTT, Manager, Donohue Bros., La Malbaie Que., who brought wife and daughter; BILL LANG, Lithcote Co., Montreal; LEW CORCORAN, Anglo-Canadian Pulp & Paper Mills, Que.; W. W. BROWN, Technical Supervisor, Sorg Pulp Co., Port Mellon (who described operation of horizontal chipper there); F. M. MILLARD, Ass't. Supt., Bloedel, Stewart & Welch, Ltd.; R. H. R. YOUNG, Manager of Mfg., Pacific Mills, Ltd.

Bottom row, F. R. KILLAM, Industrial Coatings, Vancouver, B. C. (son of Laurence Killam, Pres., B. C. Pulp & Paper Co.); LOUIS VAN ARSDALE, Plant Engineer, Rayonier, Inc., Shelton, Wash.; FRED WEBB, Pacific Mills, Ltd., Ocean Falls, B. C.; SAM MACKAY, Engineering & Mfg. Co.; JAMES PETRIE, Manager, Bloedel, Stewart & Welch, Port Alberni, B. C.; R. PARADIS, Sorg Pulp Co.; E. T. BUCHANAN, Ass't. Chief Engineer, Consolidated Paper Corp.

Wood Utilization

A vast amount of wood formerly left in the logged off lands of the Pacific Northwest, because it was not economical to harvest it in the past, is a vast potential wood source for pulp mills, said F. W. Guernsey, chief of the division of wood utilization. Forest Products Laboratory, Vancouver, B. C.

He calculated over a million cords were left in 1946 on the British Columbia coastal regions alone. He said in the southern areas of the province there were 2,700 cu. ft. of wood broken or left on logged lands of which 60% was practical to recover and pulp.

"The potential supply of sawmill waste (as distinct from logging waste) is somewhat different, in that the utilization of this waste is already fairly complete on one form or another," said Mr. Guernsey. "Using the estimate of .4 cord per thousand feet B.M. cut, and with an annual cut of lumber in British Columbia of 2,018,094 M a total of 807,240 cords of solid waste is produced. The quantity of this waste available for pulp depends on the species, price paid to the sawmill, distance it must be transported and other factors. In this case, pulpwood must compete with other forms of utilization such as fuel, lath, broom handle squares and hog fuel."

Two of the immediate problems requiring further study in the recovery of logging waste, according to Mr. Guernsey, are: A. How long may the waste remain on the ground after the main operation before decay and insect attack make it unsuitable for use? B. What are the most economical methods of yarding and loading the recovered materials?

The larger sawmills were better able to utilize their waste to advantage, but in the case of the smaller mills some cooperative scheme should be developed, in Mr. Guernsey's opinion. He added that while his studies were confined to one area on the Pacific Coast, the same potential use was indicated, with parall conditions, for the whole Northwest Pac Coast area.

Mr. Guernsey recalled the so-cal Ladysmith experiment undertaken

(Continued on Page 84)

MORE CANADIAN PARTICIPANTS (Left to right): Top row, JACK WILCOX, Manager, Process Equipment Div. Electric Steel Co., Portland, Ore.; GEORGE ALLAN, President, Canadian Sumner Iron Works, Vancouver, B. C.; DON LIVINGSTON, Electric Steel Foundry Co., Vancouver, B. C.; G. L. M. HELLSTROM, Paper Machinery, Ltd., Montreal; EMIL CREUTZ, American Heat Reclaiming Co., New York; HALVAR LUNDBERG, G. D. Jenssen Co., Seattle, Washington.

Bottom row, W. R. DICKIE, AIM Steel Products, Vancouver, B. C., who has been just appointed Acting Secretary, Western Branch, Canadian Technical Section; ALEX RITCHIE, Manager, Whiting Corp. (Canada), Ltd., Toronto; T. B. HARGREAVES, Ass't. Resident Manager, Crown-Zellerbach Corp., Port Angeles, Wash.; J. A. COCHRANE, Powell River Co.; F. H. LUDWIG, Bloedel, Stewart & Welch; S. A. COLLICUTT, Powell River Co.; E. A. HANSON, Powell River Co.

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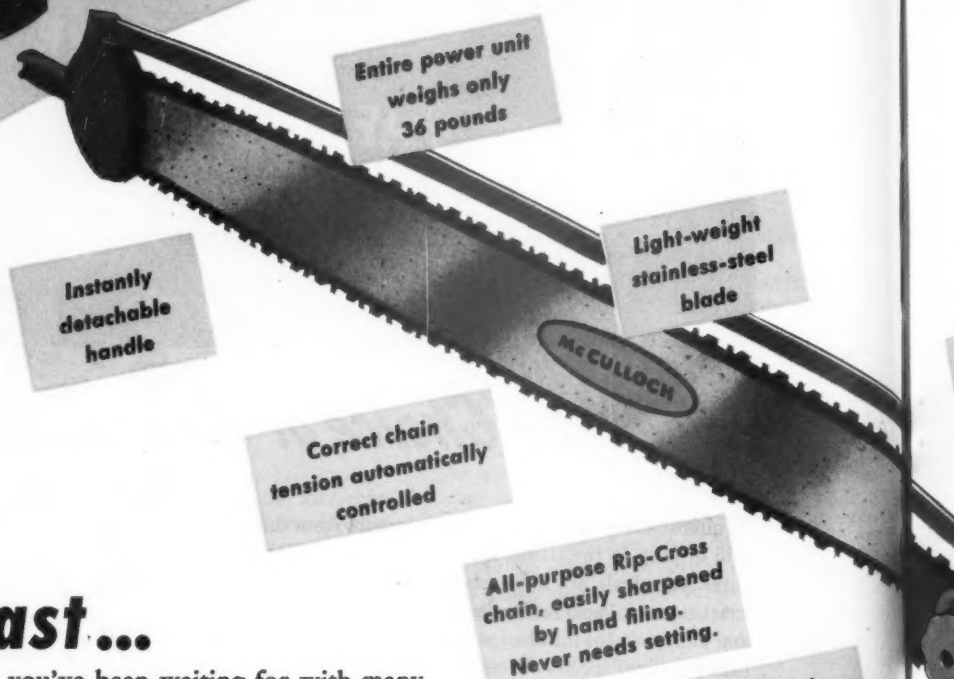

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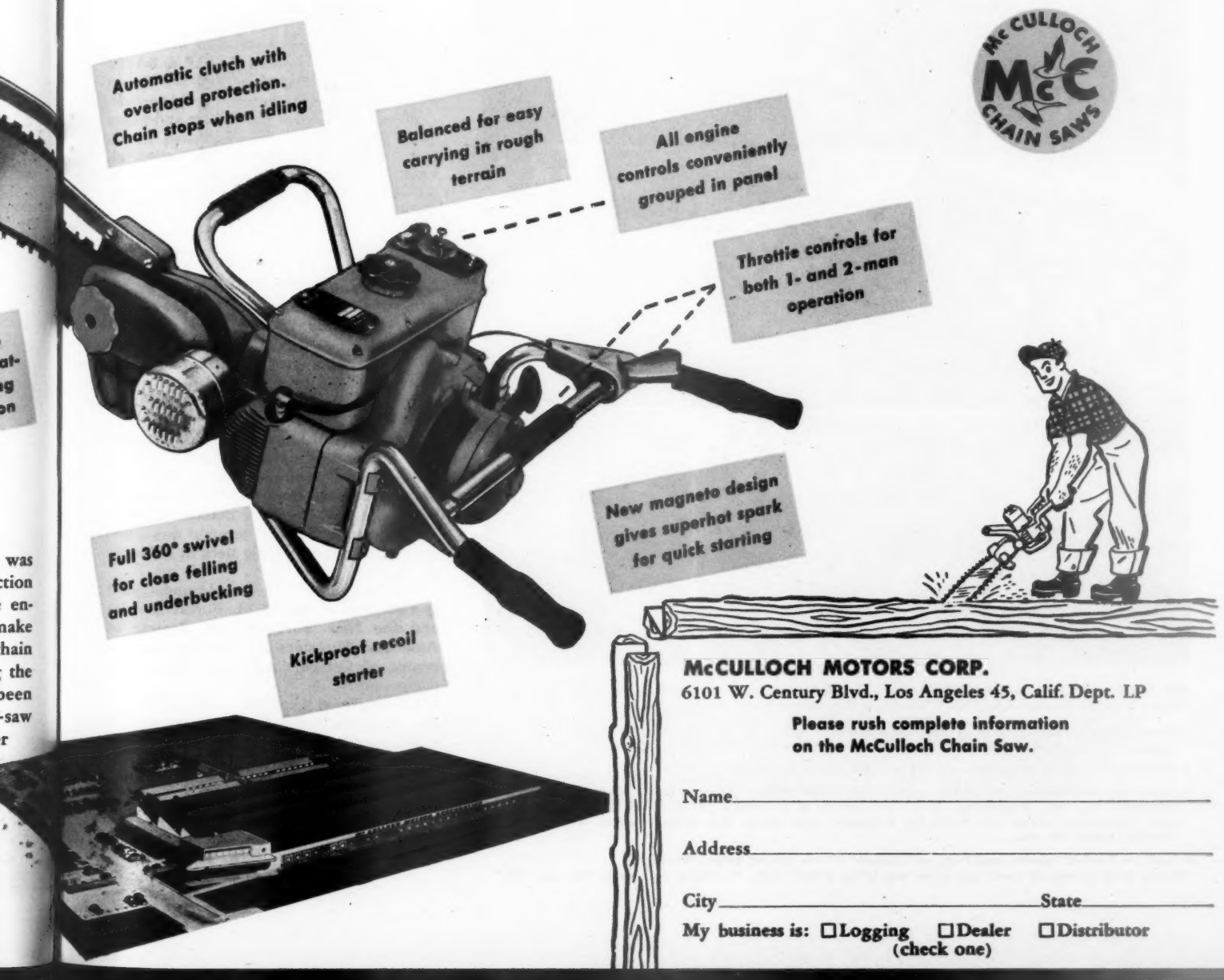

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BIG SHOW IN NORTHEAST U. S.

Marathon's Invention Is a Feature

Logging - Equipment demonstrated.

THIS SERIES OF PICTURES SHOWS HOW Pacific Car and Foundry Co.'s Standard Carco Sulky, with Snatch Chokers invented by Marathon Corp.'s Woodlands Dept., operates:

1. Standard Carco Sulky attached to Allis-Chalmers HD-5 backing up to logs. Logs in woods are already trimmed. The winch line extends out from sulky to a group of logs to be gathered.

2. Three logs are shown being gathered, as the winch line is drawn in.

3. Seven logs being drawn to the sulky, bunching with snatch choker system. Andy Shyptycki, MacDougall Equipment Co., Inc., Binghamton, is at the controls; E. J. "Swede" Anderson of Marathon Corp., is in right foreground; George Carr, Pacific Car & Foundry, near center; Bob Sinclair, Eastern representative of Carco, is behind the tree.

4. Logs are bunched together and front ends brought off the ground behind the sulky.
The two small pictures at lower right show logs being snaked away to landing on way to the pulp mill.

What was claimed to be the largest logging demonstration ever held in the Northeast U. S., took place on Sept. 8 at Cooperstown, N. Y., and—due to popular acclaim—was held over and shown again on Sept. 9.

Pictures of some of the most interesting equipment were taken by **PULP & PAPER** at the scene of this show and are shown on this page and accompanying this article.

Representatives of many pulp and paper mills, especially of the Northeast states, had an opportunity to see in action all kinds of equipment from power saws to portable pulpwood mills and log handling machinery.

One of the most popular attractions was a Carco Logging Sulky-Winch combination, produced by Pacific Car & Foundry Co., of Renton, Wash. Powered by an Allis-Chalmers HD-5 tractor, the Carco sulky-winch rig utilized a new method for gathering logs. Described as the "snatch" choker system, the method has been developed by the woodlands department of Marathon Corp. of Rothschild, Wis.

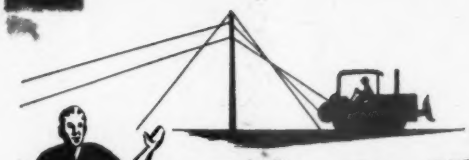
The Witherell Log Loader, developed in New England; a mammoth Drott 4,000-lb. Skid-Loader; power saws from the latest Mall saws to the Homelite One-Man Electric Chain saw, etc., were demonstrated. A Frick Portable Sawmill brought down and piled cut lumber in neat tiers in a matter of minutes.

The demonstration was held under joint sponsorship of the U. S. Forest Service and the New York Section, Society of American Foresters, in the geographical center of Ostego county, 12 miles from Copperstown, N. Y.

Far removed from any railroad facilities, with the nearest city of any size 50 miles away, the show drew an estimated crowd of 4,000. They came in cars, trucks and buses to witness the various demonstrations.

The woodlot, fringing a pasture of a hundred acres was composed almost entirely of deciduous trees, such as oak,

(Continued on Page 57)



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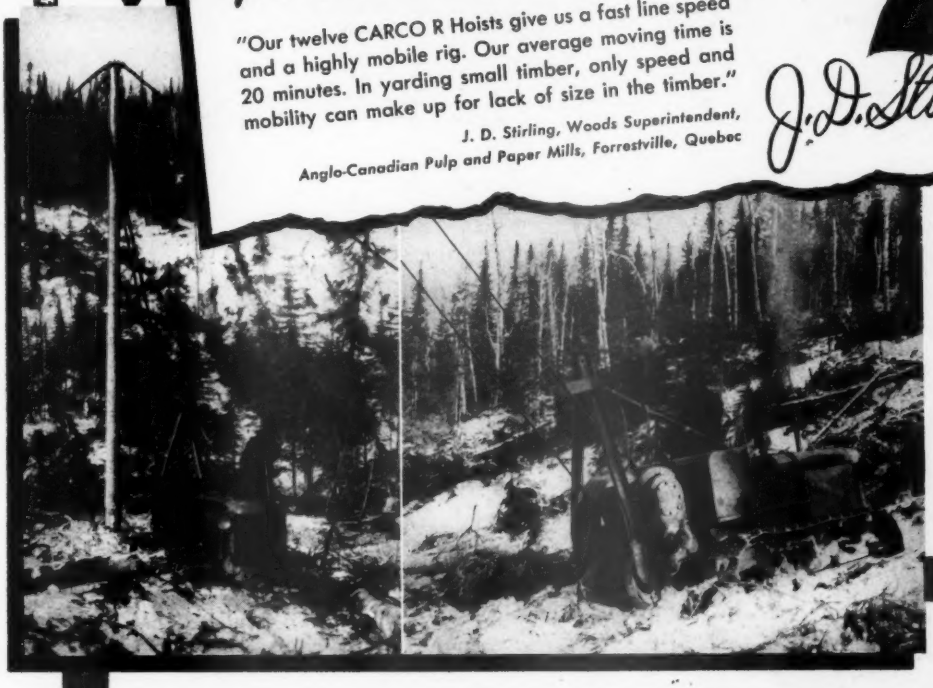
J. D. Stirling, Woods Superintendent,
Anglo-Canadian Pulp and Paper Mills, Forrestville, Quebec

J. D. Stirling



Tractor-mounted, high speed CARCO R Hoists with portable spars are the fastest high lead decking combinations in pulpwood forests today. The 20-minute moving time at Forrestville includes unfastening the guy lines, lowering the spar, transporting to a new setting (about 500 ft.), erecting the spar and fastening the guy lines.

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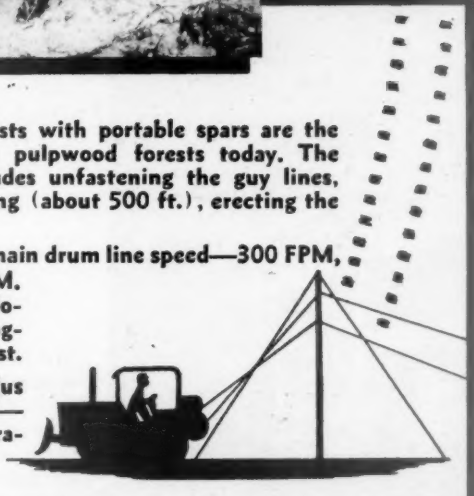

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Send a postcard for the latest information on mechanized pulpwood logging.

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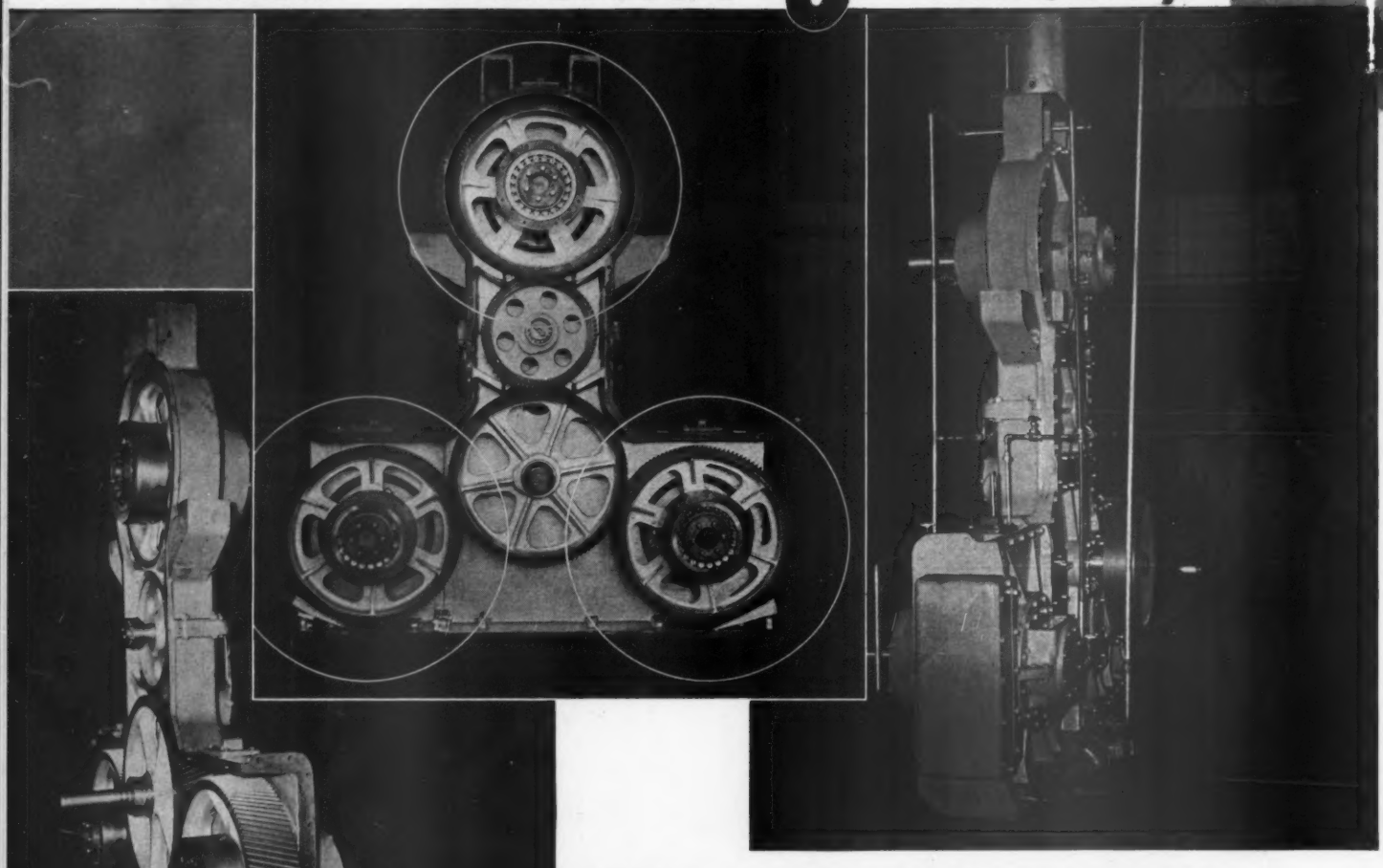


HIGH SPEED DRYER DRIVE

Here is the latest high-speed drive for drying cylinders—smooth flowing power . . . setting new production records on the latest Puseyjones Machines.

Operated in shop test at equivalent paper speeds up to 4,000 feet per minute with minimum oil temperature rise, and without vibration or back-lash.

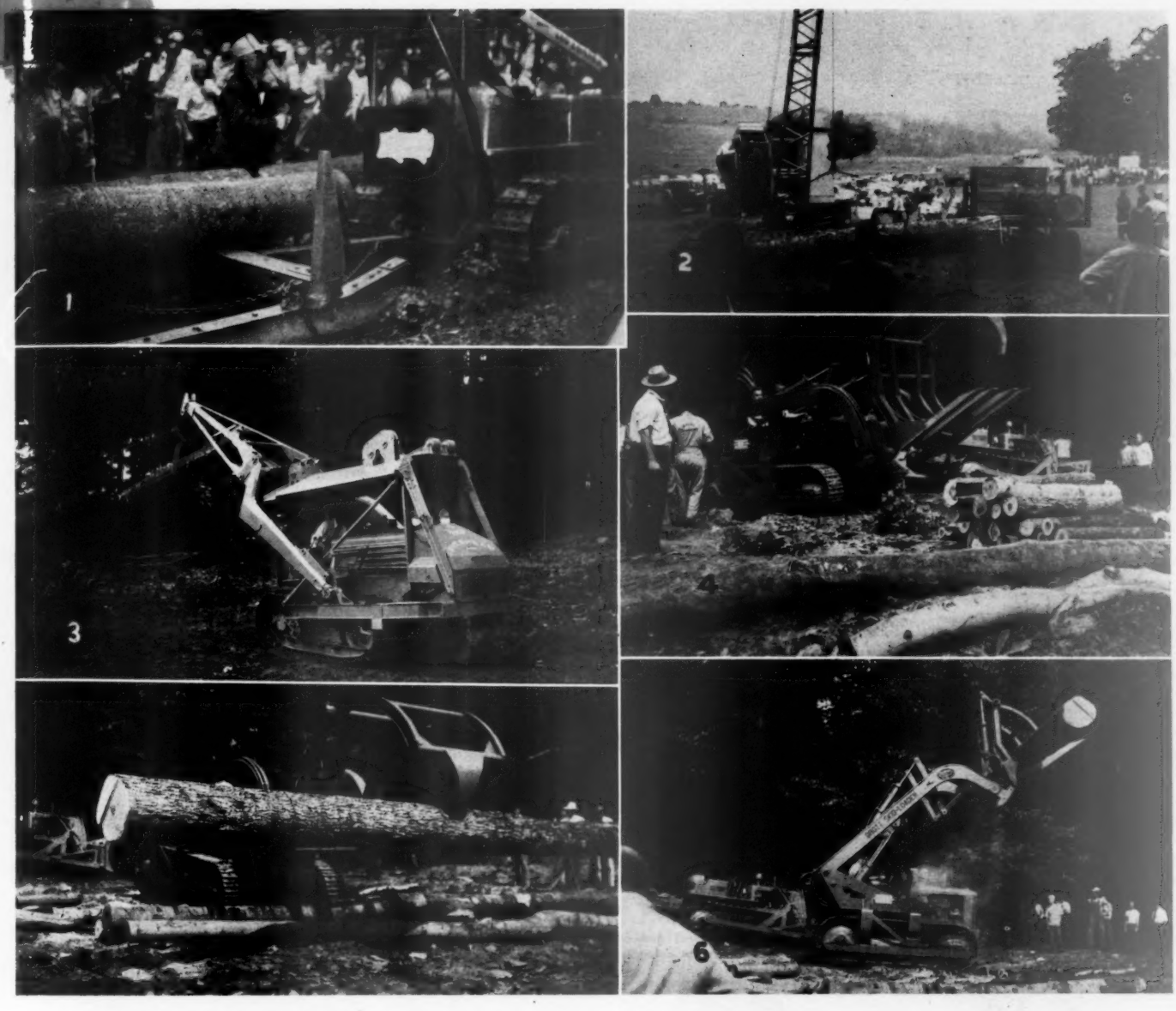
Check these important improvements:

(1) Each idler gear supported by two heavy-duty bearings;
(2) All gears dynamically balanced;
(3) Interior channelways for delivering oil direct to each idler gear;
(4) All outside cover plates may be removed in sections for convenience when replacing gears and bearings;
(5) Dryer bearings located outside dryer gears for easy removal.

The new high-speed Dryer Drive is another outstanding development of Puseyjones, complementing the "Rapi-Drape" Wire Changer, the Flow Spreader, the "Simplex" Press Part, the Stream Flow Vat System, the Stream Flow Cylinder Mould and the improved Steam Joint. For the latest Fourdrinier Machine, Cylinder Machine, Yankee Machine, or a modification of any of these types – see Puseyjones first.

THE PUSEY AND JONES CORPORATION
Established 1848. Builders of Paper-Making Machinery
Wilmington 99, Delaware, U. S. A.

THE SIGN OF TRADE MARK SUPERIOR QUALITY



EQUIPMENT SHOWN IN NEW YORK—1. Witherell Log Loader, invented by A. E. Witherell, Westhampton, Mass.; distributed by Clark-Wilcox Co., Boston. This has International Diesel drive.

2. "Quick Way" Truck Crane, Model E, made in Denver, Colo., loads yellow birch with R. G. Herbst at the controls. Distributed by Howe Bros., Troy, N. Y.

3. "Sargent Overhead," mounted on Cletrac "B" with Dick Seavey of Portland, Me., at controls. Distributed by Robert Kinne, Utica, N.Y.

4. Drott Skid-Loader, John Drott of Milwaukee at the controls. This has 4,000-lb. capacity.

5. The Drott Skid-Loader bites into a dainty morsel.

6. And swings off ready for loading.

elm, cherry, birch and beech, the largest of which was not more than 20 inches at the base.

Attracting considerable interest was the Carco sulky-winch rig employing the "snatch" choker method of log gathering. Developed by the Marathon Corporation, one of the Wisconsin's big paper producers and "wood conscious" leader in progressive woodlands practices, the "snatch" choker was demonstrated by E. J. "Swede" Anderson, of Marathon.

"Swede" demonstrated how to gather a [illegible] of from five to eight scattered [illegible] minimum of time. The Allis-[illegible] HD-5 equipped with the Carco [illegible] and Standard Sulky backed [illegible] growth of oak and hard maple. These averaged 15 to 16 feet in length. The winch line was carried out and hooked onto the most distant of a group of seven fallen and trimmed logs.

Then pre-set "snatch" chokers from six other logs were snatched onto the winch-line. As the winch line was hauled in, the seven logs from various sections of the wooded spot slowly crawled over the earth until they were gathered together into a bunch behind the sulky. With the front ends off the ground, the logs were snaked out of the woods, obstacles having little or no effect on the entire operation.

Marathon's "snatch" choker set-up, which is manufactured by Pacific Car and Foundry Company of Renton, Wash., as part of the Carco rigging line, employs a Bardon type hook for securing the cable choker on the log on one end. The "snatch" block for hooking onto the winch line is on the other. The chucks of the snatch block open so the sheave may be placed over the line, and the sheave permits the choker to roll on the winch line reducing wear.

Other machines on display included the "Logger's Dream," a crane-type loader mounted on a Ford truck, manufactured by the Taylor Machine Works of Louisville, Miss.; the "Michigan" Model T6-K with logging boom, being demonstrated for the first time in New York by the Rollinson Equipment Co. of East Syracuse; the "Sargent Overhead" mounted on a Cletrac "B"; the "Bantam," manufactured by

DEMONSTRATION OF SAWS—Left to right: Homelite Electric Chain Saw, preparing logs for pulpwood. Mall No. 7 Chain Saw in action. Portable sawmill of Frick Co., Waynesboro, Pa.; Paul Fry at the saw, S. Mohn throwing off, under direction of W. R. Nixon and E. S. Kaufman, Edward S. Warfield, Sales Manager, Farm Machinery Div., and George F. Musgrove, Branch Manager, Canadaigua, N. Y.

Schield Bantam of Waverly, Ia.; and the Mall No. 7 Two-Man Chain Saw.

A practical outfit for small-scale operations demonstrated, with the exception of the various chain saws, was the Witherell Log Loader, invented and patented by A. E. Witherell of Westhampton, Mass. It consisted of a telescoping boom, made from extra heavy pipe, mounted on a TD-6 International Diesel and was made for logs up to 16 feet in length— one at a time. The boom carries, on two sheaves, ⅜-inch wire rope from a special built-up winch up over the center of a sled or trailer, where it is attached to a pair of tongs. Behind the outfit is drawn a heavy sled on to which the logs are loaded and drawn from the woods.

500 SEE WOODS MACHINERY

Unusual Exhibition at Quebec Meeting

Five hundred representatives of the pulp and paper industry of Canada and the United States, government foresters and equipment distributors and manufacturers attended the recent three-day late summer meeting of the Woodlands Section, Canadian Pulp and Paper Association, at St. Johns, Que., and witnessed some of the most elaborate demonstrations of mechanized logging ever staged in eastern Canada.

Mechanization was the theme throughout the sessions, which were held on the grounds of Dawson College, formerly a Royal Canadian Air Force training station and now being used by McGill University to accommodate student veterans.

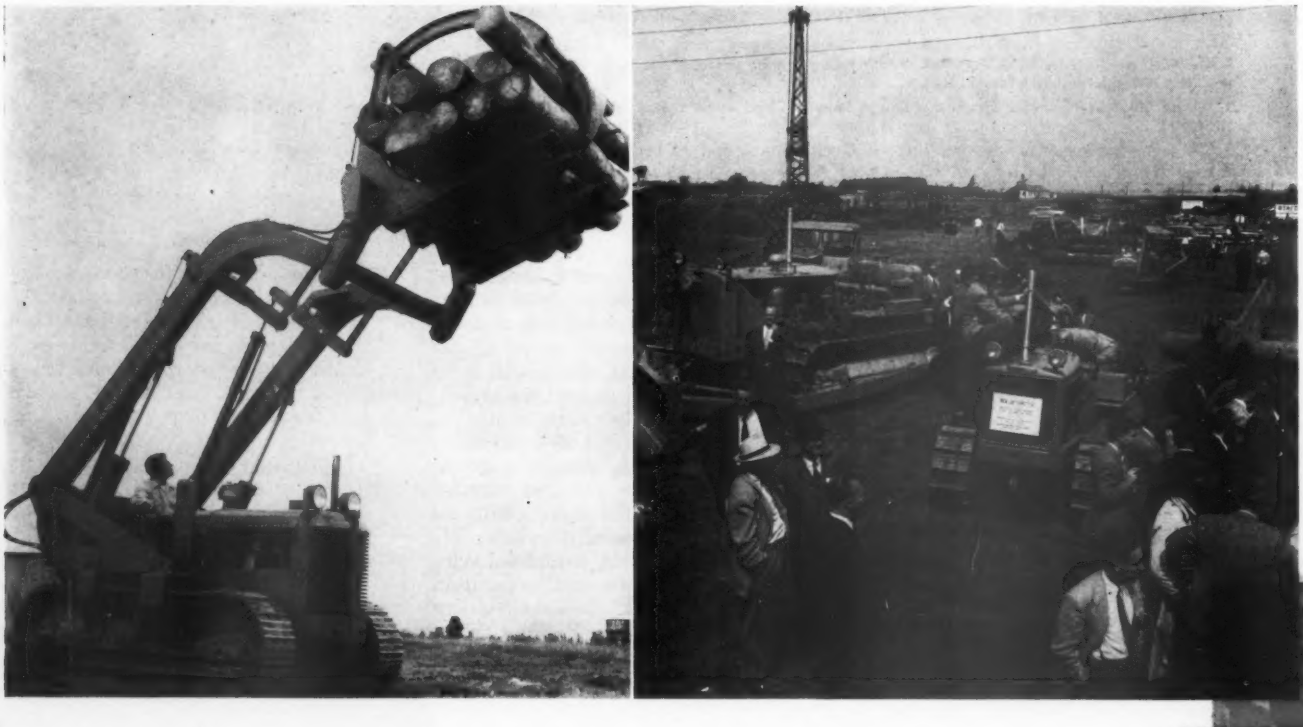
Heavy machinery manufacturers from all parts of Canada and the United States displayed earth-moving and wood-loading machines, power saws, fire pumps, portable pulpwood slashers and sawmills, tractors and other units designed to facilitate and expedite logging and forest protective operations.

Other exhibits showed fly dopes, plastic tablewear, dehydrated foods, fireproof paint and other new products which go towards improving living conditions in the woods.

The meeting was organized by W. A. E.

(Continued on Page 60)

FEATURED AT ST. JOHNS, QUE., WOODLANDS MEETING was mechanized logging equipment pictured above. At left is an Allis Chalmers skid-loader. At right delegates examine equipment.



Mills that Use SIMONDS

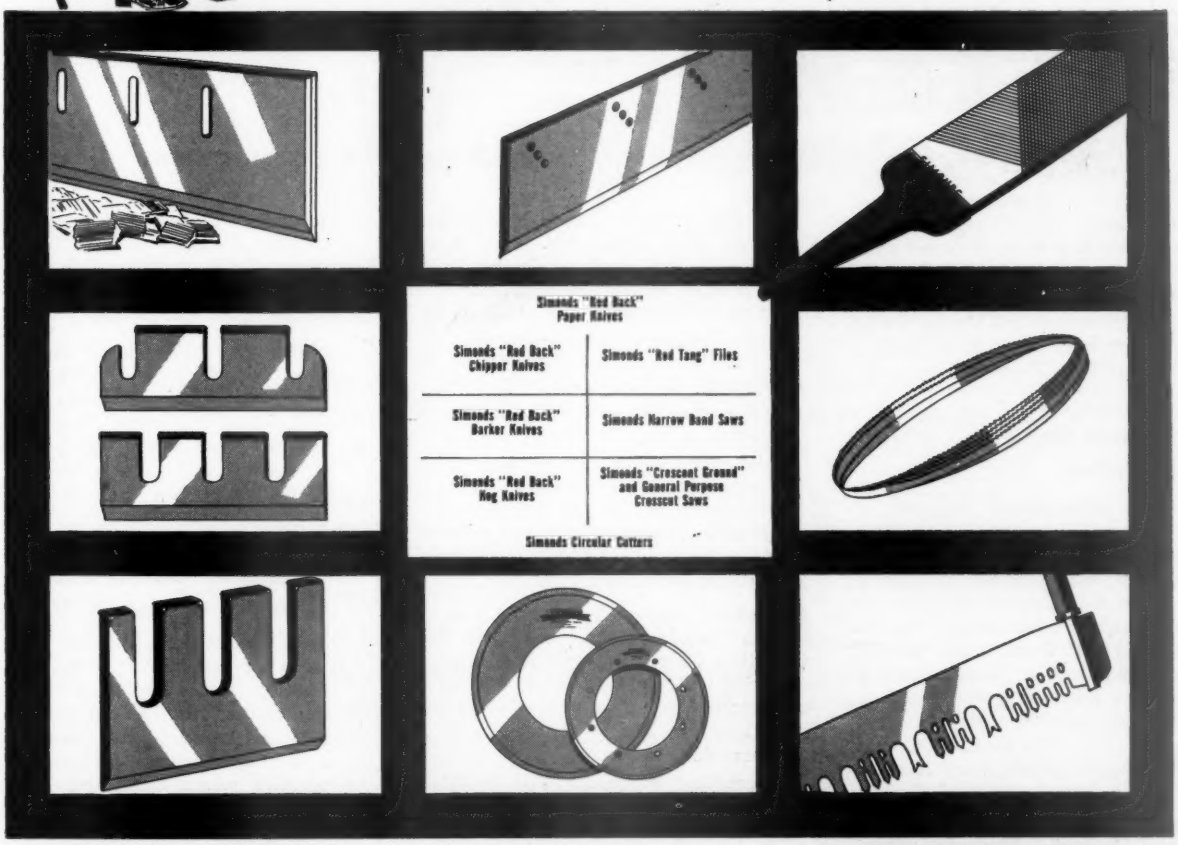
Stay in the Highlands of CONSISTENT CUTTING EFFICIENCY

Simonds runs one of the world's top tool steel mills — to get special steels that are consistently good enough for Simonds Cutting Tools.

Simonds originates special methods and equipment to harden, temper, grind and finish these tools so that they will deliver an honest day's work, day after day.

And overseeing every operation are seasoned Simonds men . . . many with 20, 30, and 40 years of daily living with this hard-and-fast rule: "Simonds makes *first quality only.*" And by way of keeping a running check on that quality, *they use Simonds Tools to make Simonds Tools!*

So rest assured that your cutting-tool dollar is *invested* — not spent — when you order Simonds from your dealer.



BRANCH OFFICES: 1350 Columbia Road, Boston 27, Mass.; 127 S. Green St., Chicago 7, Ill.; 416 W. Eighth St., Los Angeles 14, Calif.; 228 First St., San Francisco 5, Calif.; 311 S. W. First Avenue, Portland 4, Ore.; 31 W. Trent Ave., Spokane 8, Wash. *Canadian Factory:* 595 St. Remi St., Montreal 30, Que.

SIMONDS

Cutting Tools

the Pulp & Paper Industry

SIMONDS SAW AND STEEL CO.

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Pepler, manager of the Woodlands Section, and the delegates were greeted by J. W. Paterson of the E. B. Eddy Co., Hill, Que., chairman of the section.

F. L. Mitchell, general manager of the association, urged the woods managers, foresters and forest engineers attending the meeting to harness the results ot research to produce wood economically with due regard to reforestation and protection of the forest.

Among the papers presented were those of A. D. Williscroft, service supervisor, Just Equipment and Supply, Ltd., on methods of instruction on the use and maintenance of mechanical equipment; A. Stewart, training supervisor, Price Bros. & Co., on a training course for tractor operators; B. J. McColl, mechanical engineer, Woodlands Section, on mechanical equipment in use in logging operations; E. E. Esgate, of E. E. Esgate Associates, New York, on engineering and pulpwood production; R. H. Thomson of Mall Tool Co., on the care and maintenance of power and chain saws; Walter Holder, of Barber-Greene Co., on bituminous surface and main log hauling roads, and Dr. N. W. McLeod of Imperial Oil, on economic justification for paving logging roads.

Dr. N. A. Osara, professor of forest economics at Helsinki University, Finland, and managing director of the Central Forest Association there, extended an invitation to attend the world forest conference to be sponsored by UNFAO in Finland next July.

Among delegates from the United States were H. E. Brinckerhoff and H. H. Jefferson of the American Pulpwood Association.

Wage Increases Are Sought in Ontario

Loggers and other woods employes of northern Ontario pulpwood camps are asking wage increases amounting to $2 a day. Unskilled labor would receive a minimum of $8.50 a day if the new increases are granted; cooks would receive $10; cookees, $7.70; blacksmiths, $10.25; mechanics, $10.25. Men working on a piecework basis are now getting highest wages, some earning $20 a day. Cutters (buckers) are paid $17 to $20 on that basis, depending on production. Haulers average $11.38 a day.

The demands are being made by the Lumber and Sawmill Workers union, which has a membership of around 4,000. Eighteen companies are affected.

Mando Forestry Fellowship

Minnesota and Ontario Paper Co. has awarded a $900 University of Minnesota scholarship for the coming year to Ralph Anderson of Squaw Lake, Minn., for investigation of a particular forestry project. It is to establish a series of study plots to determine the best methods of cutting black spruce affected by mistletoe blight in order to eliminate or control the damage which is of great concern to timber industries.

NEW MILLS IN FAR EAST CANADA

LOCATION OF NEW MILLS IN MARITIME PROVINCES

In the far eastern corner of Canada—in New Brunswick and Nova Scotia—companies like Bathurst Power & Paper Co., Mersey Paper Co., and New Brunswick International Paper Co., have been making important plant improvements, and the Fraser Companies and Minas Basin Pulp & Power Co. are engaged in substantial new construction enterprises.

At Edmundston, N. B., the Fraser Companies are building a new pulp bleaching plant, and at Newcastle, N. B., they are building a 120-ton bleached sulfate pulp mill, expected to be in production early next year. Minas Basin's new installations are at the Hantsport mill.

Probably the most discussed new project in Canada at the moment is that of Maritime Pulp & Paper Mills, Ltd., a corporation which plans to build a $65,000,000 newsprint-kraft pulp mill at Lepreau on the Bay of Fundy in southern New Brunswick.

Consulting engineers will be Stadler, Hurter & Co., of Montreal, which has been retained for several big undertakings in that field recently.

General manager will be Frederick C. Bagley. Incorporators are listed as John L. Rayward, publisher's agent; W. F. Keene, publisher's agent; I. B. Purdy, all of New York; Frederick C. Bagley, Augusta, Me., paper manufacturer, and Edward C. Atkinson, Fredericton, N. B., lawyer.

According to Mr. Atkinson, surveys for construction of the proposed 500-ton newsprint mill and 500-ton kraft mill were to be started this summer, with contracts soon to be awarded.

Capital stock of the company, incorporated by special act of the New Brunswick legislature this year, will consist of 350,000 shares of $100 each, and a bond issue of $30,000,000 will be floated later, probably in the United States, according to Mr. Atkinson.

The mill will require around 400,000 tons of hardwood and softwood pulpwood per year, to be delivered by water and rail. Last year, more than 600,000 cords of pulpwood were exported from New Brunswick. The new company will utilize much of the pulpwood now being exported.

Conditions Control Planting By Machine, Says W. Va. Co.

About two and a quarter pine seedlings were planted in North and South Carolina by West Virginia Pulp and Paper Co. during the 1947-48 planting season. Bulk of the work was done by hand but a planting machine was used to good advantage when conditions permitted on about 330 acres of 3,350 planted.

LongLac Mill Gets Wood

Pulpwood piles at the new Terrace Bay, Ont., sulfate pulp mill of the LongLac subsidiary of Kimberly-Clark Corp. were already 90 ft. high at the mill site this summer. Start-up is scheduled for this fall.

Wood for Lake States

Paper mills in Minnesota and Wisconsin are drawing pulpwood all the way from the Peace River country in Alberta, where more than 16,000 cords having been shipped out during the past year.

A Twist of The WRIST

Swivels the Blade in Any Position!

PIONEER

ONE MAN POWER SAWS

The manufacturers of the I.E.L. "PIONEER" one-man power saw blush with pride in reporting that NOT A SINGLE MOTOR FAILURE has been recorded since production was started on the new MULTIPORT engine powering all "PIONEER" saws. "PIONEER" leads the field with this revolutionary 4.1 H.P.-rated engine developed by I.E.L. engineers.

Yes, reliable motor performance shows up in production. Operators report continually bucking up to 75 M. per day with the "PIONEER" one-man power saw, proclaiming it as the most maneuverable, easiest operated saw in their experience.

The "PIONEER" is ideal on all pulpwood operations. It is unbeatable for falling, bucking and limbing logs for lumber, pulpwood, cordwood, fence posts, mine props and railway ties. The "PIONEER" is available in 14″, 18″, 24″ and 30″ cutting attachments.

EXCLUSIVE "PIONEER" FEATURES

THE NEW "MULTIPORT" ENGINE 4.1 H. P.

EIGHT POSITION SWIVELLING

FINGERLIGHT CLUTCH

DIFFERENTIAL DOUBLE ACTING OIL PUMP

AUTOMATIC REWIND STARTER

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Progress Reported For Another Alaska Mill

Ben B. Mullen, vice president of Alaska Industrial Corp., told **PULP & PAPER** in an exclusive interview that he was well pleased with the progress being made toward the development of the proposed Sitka, Alaska, pulp mill.

It is expected that the timber bid will be placed before the end of 1948, and studies are now in progress on timber, engineering, construction costs, and transportation problems. As we reported last month, construction of a bleached sulfite pulp mill at Ward's Cove, near Ketchikan, is planned next year by Ketchikan Pulp & Timber Co.

Paul J. Timbal, New York representative of the Diamond Bank of Antwerp, 630-5th Ave., New York, is president of Alaska Industrial Development Corp.; Roy W. Johnson, Seattle, is vice president in charge of engineering; and Simon J. Nusbaum, attorney, is secretary. Charles Semal, prominent Belgian industrialist and engineer, is technical advisor. Norman B. Gibbs and Stewart E. Seaman have been retained for engineering work.

Mr. Mullen declined to say at this time whether or not the Antwerp connections of President Timbal and the association of Mr. Semal with a large Belgian and other European interests, including rayon producing plants meant that these plants would receive part or all of the production of the proposed mill. It is understood that water shipment from Alaska to Belgium or other European points would be practical from a freight cost standpoint.

Excavation Starting For Nanaimo Kraft Mill

A camp to house 450 men has been built near the site of Nanaimo Sulfate Pulp Co.'s (H. R. MacMillan) projected $12,000,000 bleached kraft pulp mill on Northumberland Channel, Vancouver Island. Rock excavation will continue until midwinter.

The mill is being designed by Howard Simons, who planned the Bloedel kraft mill at Port Alberni, B. C., and in its basic aspects will resemble the Port Alberni plant. Val Gwyther is construction engineer, and Larry Harris is working on technical details, Donald Baker is also a member of Mr. Simon's staff.

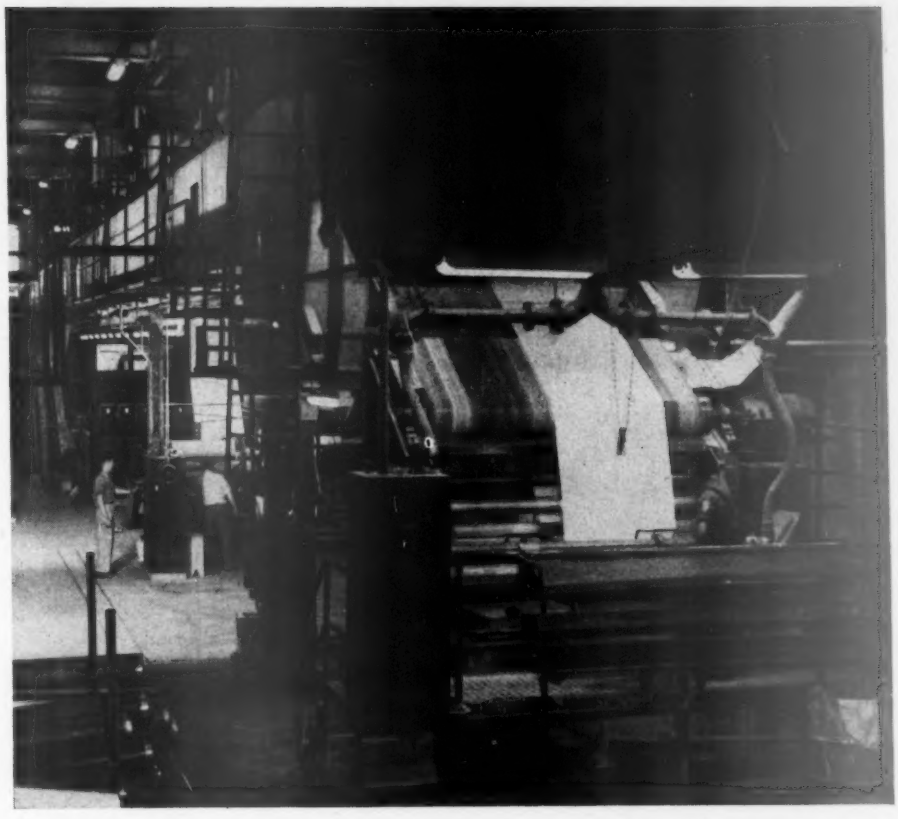
Directly in charge for the H. R. MacMillan organization is Clifford Crispin, with Jack Prescott personally representing the company at the camp.

Sprout-Waldron's New Manager For Pulp and Paper Sales

H. M. Soars, president and general manager of Sprout, Waldron & Co., Muncy, Pa., announces appointment of Frank C. Vaughan as sales manager of the expanded Pulp and Paper Machinery Division.

Mr. Vaughan's experience in the fields of engineering operation, and management includes employment with Halifax Paper Co., Inc., Hummel-Ross Fibre Corp., and Carthage Machine Co.

INSTALLED AT WATERVLIET



THIS NEW AIR DOCTOR COATER with high speed drying tunnel was just installed at Watervliet Paper Co. The roof of the coating mill had to be raised 15 ft. to accommodate the three air doctor coaters. They are expected to operate at more than 800 ft. per min. One new 88-inch coater is operating while a second, 66-inches, is being erected.

Ross Engineering Installs Container Corp. System

One of the latest installations of the Ross-Grewin air-processing system is going into the Container Corp. of America plant at Los Angeles, on the No. 4 machine, making corrugated board.

ALISTER McKENZIE, Finishing Room Supervisor at Crown Zellerbach Corp., Camas, Wash., is shown on the left. He recently moved there from Merritton, Ont., where he was with Alliance Paper Mills, Ltd., manufacturers of sulfite pulp and paper.

T. E. DOBBINS (right), formerly with Hammersley Mfg. Co., Inc., a three-machine paper mill at Garfield, N.J., is now in the Research Division of American Can Co., Maywood, Illinois, and keeping up his contacts with the paper industry, especially in development of paper milk bottles.

Contracts Are Let For Celanese Mill Equipment

Several contracts have been awarded in connection with the 300-ton alpha sulfite pulp mill project of Columbia Cellulose Co. (Celanese Corp. of America), near Prince Rupert, B. C.

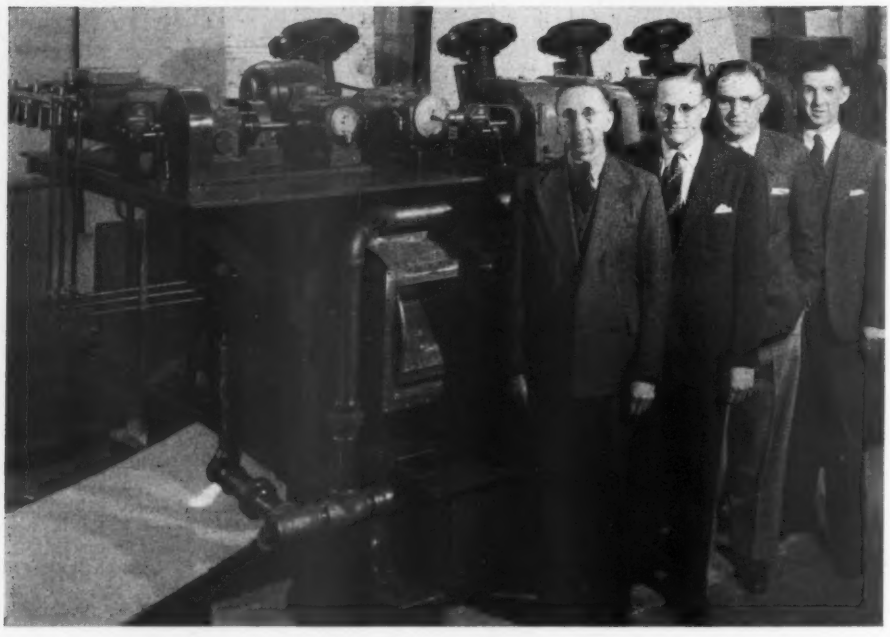
Structural and reinforcing steel are being supplied by Dominion Bridge Co., and electrical unit substations are to be installed by Westinghouse. Worthington has received an order for turbines. Steam generating units are to be provided by Foster Wheeler Co.

The mill has been designed by the Montreal firm of Stadler, Hurter & Co., and Fred Hurter, head of this organization, was on the coast during the past month checking over details in connection with the project. Dr. R. H. Ball, technical coordinator for the Celanese Corp., also visited the site.

SIX PER CENT wage increase became effective recently at Thilmany Pulp & Paper Co., Kaukauna, Wis., plus a 2 cent shift differential. The company's 1,100 hourly employes now have base rates of $1.18 for men and $1.04 for women.

CONSOLIDATED WATER POWER & PAPER CO., distributed 128,700 white spruce trees to 315 land owners in Oneida, Langlade, Sawyer, Forest and Rusk counties.

FOR A NEW MILL IN ARGENTINA



TWO SOUTH AMERICAN papermaking executives and two U. S. machine builders are shown here at Glens Falls, N.Y. Left to right are Edward J. Trimbey, President of Trimbey Machine Works; Carlos Ricci, manager of Juan Ortiz Mill of Celulosa, Argentina; Juan Carlos Cremonini, Mill Superintendent at the Ortiz Mill, and Roger J. Trimbey, General Manager of the Trimbey plant. Behind them is a complete pulp metering system to be installed in Juan Ortiz Mill for proportioning and controlling furnish for machine. Mill is at Rosario, Argentina, and will be in operation end of this year with 75-ton capacity on book and fine papers. This is fourth metering machine to go to Argentina from Trimbey in past year.

New "Plaswood" Plant

A $200,000 "Plaswood" plant in South Nelson, New Brunswick, is to be built. Raw materials will consist of sawdust, wood shavings, edgings, slabs and bark.

Announcement of the project was made by J. Leonard O'Brien of South Nelson, head of Chatham Industries, lumber and wood products manufacturers and Alfred Paradis, president of Paradis & Co., Montreal, lumber and pulpwood producers.

"Plaswood" is the result of research in New Hampshire during the past ten years. The process is reported to convert all kinds of wood waste into a wide range of wood products through the use of special drying equipment and the admixture of a unique urea synthetic resin. Secret of the success of the process is said to lie in the resin.

St. Helens Buys Crane For Pulpwood Handling

St. Helens Pulp & Paper Co.. St. Helens, Ore., is installing a whirley (surplus) crane at the plant for handling pulpwood. This machine has a 120 ft. boom. Pulpwood arriving at the plant by truck or on rail cars will be transported by the crane to storage, directly to the mill, or from storage to the mill. According to Max Oberdorfer, president and general manager, this crane, made by Washington Iron Works, will go into production in September. The driving of piling was started in early August.

Russians Take Over Many Newsprint Mills

Russia has taken over many of the German newsprint mills, Ernst Mahler, executive vice president of Kimberly-Clark Corp., told members of the Kimberly, Wis., mill foremen's club recently. Mr. Mahler, who made a postwar trip to Europe for the government, said that very little newsprint production equipment in Europe has been put into operation since the war.

The people of the world are hungry for news and there is not enough newsprint to supply them, he said.

Books for Germany To Be Studied by Mission

George Brett, Macmillan Company, and William Sloane, Sloane Associates, led a committee to Germany recently in behalf of American book publishers at the request of the U. S. government and in cooperation with the Army and State Department.

Reason: Russia has distributed 7,000,000 books in Germany; England less than half that number; the U. S. even less than England. The publishers' committee has a big job—to find out why, to recommend improvement, and to discover ways to print the books in Germany. One of the biggest problems: to find the paper.

BLAKE MOFFITT & TOWNE, pioneer Pacific Coast paper wholesalers, have opened a new division at 709 Bennett Ave., Santa Rosa, Calif. In charge will be Arthur S. Andersen, a representative of the San Francisco division for many years.

New Foreign Sales Division For Black-Clawson Co.

A new foreign sales division of Black-Clawson Co., of Hamilton, O., also representing the affiliate firms of Shartle Bros. and Dilts Machine Works, has been created and it is headed by P. H. Williams.

For the past five years Mr. Williams was sales manager and director of the new Johnson & Johnson paper wadding products mill built at Sao Paulo, Brazil, by that New Jersey firm and he had the job of introducing a line of paper products very largely new to South American markets. He was also with Firestone in Brazil.

Resident Engineers Named For Celanese Pulp Mill

Construction of the water line from Prudhomme Lake to Port Edward, site of Columbia Cellulose Co.'s (Celanese Corp. subsidiary) $30,000,000 alpha sulfite pulp mill, involves running under the height of land from a point just beyond Galloway Rapids and skirting the shore and highway to Watson Island. The tunnel from Galloway Rapids has been started.

Main contracts for erection of the buildings are expected to be awarded shortly.

George H. Martin of Vancouver, B. C., is acting as engineer in connection with preliminary construction, and Charles H. Klotz is expected to take over as project engineer during the coming month. The firm of Stadler, Hurter & Co., Montreal, is directing the engineering.

Meanwhile forest surveys are continuing with a view to lining up a timber supply for the mill, T. A. V. Tremblay and Robert Pethic of Columbia Cellulose Co.'s forestry staff, recently completed a survey cruise up the Skeena River as far as Terrace, the first time such a passage has been made of that kind since retirement of the old stern wheelers when the Grand Trunk Pacific was built to Prince Rupert, B. C., more than 35 years ago.

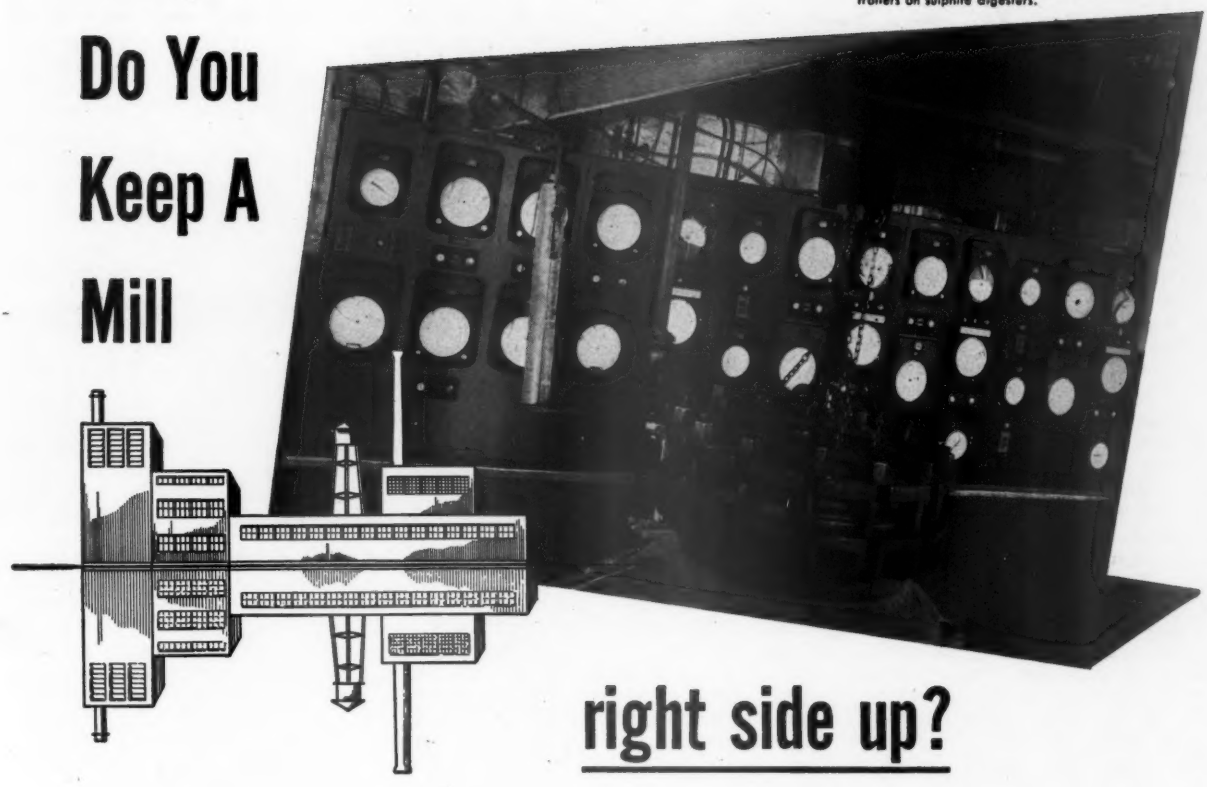
Semi-Chemical Kraft Seen as Promising

There is a very great future in semi-chemical kraft pulping operations in the opinion of Frank Hutton, Babcock & Wilcox, New York City. Mr. Hutton suggested this trend in a talk given recently before the New York luncheon group of suppliers and equipment men which meets regularly at the Commodore Hotel.

Mr. Hutton, who was speaking on the subject of black liquor recovery units, also pointed out that the laboratory has shown that recovery systems are possible for every known pulping process. A few practical conditions prevent the laboratory work from being carried into full scale operations and these, he said, might well be cleared up as time goes on.

Mr. Hutton drew one of the largest luncheon groups of the year. H. E. Overacker, chairman, appointed a committee to nominate a 1949 chairman: Norman S. Weil, Ivar Eckholm, William Willits—and they came up unanimously with the name of Bill Metcalfe of J. O. Ross Engineering Corp.

How Do You Keep A Mill right side up?



Automatic control system showing Bristol's Time-Temperature and Pressure Controllers on sulphite digesters.

Answer: by putting all the variables—temperature, flow, level, consistency, pressure, time, and pH value—under the unfailing observation and control of Bristol instruments.

Below are some of the instruments designed by Bristol for pulp and paper mill applications. Have us send you information about the Bristol indicating, recording and automatic controlling instruments which will help put *your* particular operations on a firm footing for more uniform quality and lower-cost production.

DIGESTER ROOM

Time-Temperature Control
Time-Pressure Control
Relief Control
Steam Flow Record and Control

PULP WASHERS

Blow Tank Consistency
Stock Flow Control
Tank Level Control
Shower Flowmeters

RECOVERY PLANT

Black Liquor Flow
Green Liquor Baume Control
Dissolving Tank Level Control
Liquor Storage Level

EVAPORATORS

Liquor Flow Control
Steam Pressure Control
Temperature Recorders
Steam Flow

CAUSTICIZING PLANT

Green Liquor Flow Control
Heater Temperature Control
Tank Level Recorders

LIME KILN

Hot End Temperature Control
Draft Control
Oil Flow Record

THE BRISTOL COMPANY, 142 Bristol Road, Waterbury 91, Conn. (The Bristol Co. of Canada Ltd., Toronto, Ontario, Bristol's Instrument Co. Ltd., London N. W. 10, England) West Coast: Branch Factory—40 Berry St., San Francisco 7, Cal. Branch Office—White Building, Seattle 1, Washington. Lake Region: Branch Factory & Office—351 East Ohio St., Chicago 11, Ill. Southern States: Branch Office—Comer Building, Birmingham 3, Alabama.

Immediate Delivery—Bristol has hundreds of Recording and Controlling Instruments as well as Pyrometers and Thermocouples in stock for immediate delivery. Send for Bulletin W1811, Stock Instruments and P1235, Thermocouples and Pyrometer Accessories.

BRISTOL

Engineers process control for better products and profits

AUTOMATIC RECORDING AND CONTROLLING INSTRUMENTS

Million Dollar Program
AT VICTORIA MILL

The extensive modernization and expansion program of Sidney Roofing & Paper Co., Ltd., is rapidly taking shape on the company's property in Victoria, B. C., which was visited recently by **PULP & PAPER**. Total cost is estimated to exceed $1,000,000.

A Pusey & Jones six-cylinder, 82-inch trim board machine, with driers and press section acquired from Sorg Pulp Co., will be added. It will make 35 tons a day. Almost all phases of the company's diversified operations are marked for improvement.

The first major unit to commence operation will be the roofing division. This is an entirely separate building of the most modern design, embracing 25,000 sq. ft. of floor area. This building is complete and the installation of machinery and equipment is in operation. This plant has in excess of double the present roofing capacity, and will allow the manufacture of a wide range of roofing products. Full use of the capacity of this new plant will be delayed until felt production is increased. Present capacities of this mill is 60 tons a day of board and felt and 10 tons a day of groundwood.

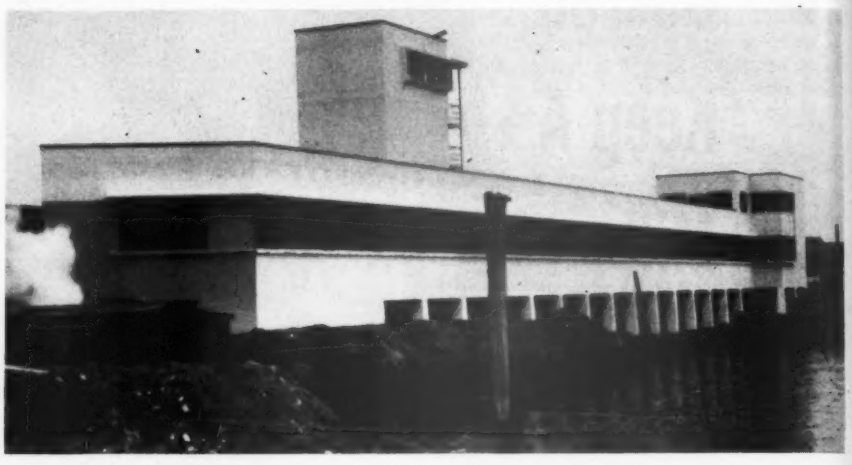
The plant itself is located on harbor waterfrontage, where modern wharf facilities are being provided for the handling of finished products direct to barges.

Every facility is provided for plant personnel on the second floor of this new structure. Lunch rooms, locker and shower rooms are ultra-modern in design. The entire plant interior will be decorated to the specifications of color engineers to provide maximum efficiency and minimum eye fatigue, and of course, resulting general fatigue, among employes.

Extensive changes towards modernization and increased production are also being made in the paperboard and felt manufacture division. New buildings are in the course of construction for the housing of Hydrapulper stock preparation equipment, and for the Pusey & Jones machine. The stock preparation building has progressed to the point where installation of machinery has begun. This program, when complete, will materially increase the production of paperboards, and will supply the extra quantity of semi-finished products necessary for the new roofing division unit.

The Hydrapulpers, as well as agitation for new horizontal stock chests, the latter consisting of three 42-inch Miami adjustable pitch propeller agitators, are supplied by Alexander Fleck, Ltd., Ottawa, affiliated with the Black-Clawson-Shartle Bros.-Dilts organization in Ohio, the originators of the equipment.

The main stock preparation units are two 14-inch diameter Hydrapulpers. One, a continuous Hydrapulper, is now located at the rear of the building immediately next to wharf facilities, and will be used to process waste paper which is largely received by scow. The new unit is complete with conveyor, trash removal and ragging-out facilities. The second Hydrapulper, of the same size, will be a batch type, for the processing of virgin pulps, uncontaminated by trash. In conjunction are modern rifflers, deckers, and new type slush stock chests, complete with propeller agitation. These chests are to serve as temporary storage until the stock is required for the refining processes.



NEWLY COMPLETED mill building for Sydney Roofing & Paper Co. in Victoria, B. C.

New machinery for processing of coarse fibers is also included in this program.

This new stock preparation building has also been designed to serve as the main plant entrance. Offices of senior plant personnel, first-aid room, laboratory, engineering offices, and personnel time clocks will be located adjacent to this entrance.

Also included in this building will be new locker and washroom facilities for plant personnel.

The modern facade of the building features horizontal lines of modern nature, and this general design will be extended in time to include all existing buildings.

The new paperboard machine is to be housed in another new building to be erected on the site of a building presently being torn down. This machine, now being prepared for operation, will produce high grade paperboards and will free additional capacity on the other two paper machines for increased felt production. The two existing machines, of 60 tons capacity, are to be improved.

The new Fibrerock Division plant has just been completed and is in operation. This unit is for the production of fibrerock, a rigid structural, fireproof insulating sheet or slab, varying in thicknesses of from one to three inches. In the early stages of production it is being manufactured in sheets 4 ft. by 8 ft., of one inch thickness.

President and founder of Sidney Roofing & Paper Co. is R. W. Mayhew, who for many years has represented Victoria in the House of Commons at Ottawa. Vice president and managing director is his son, R. Logan Mayhew. A. Welch is general manager, John Vickers (P. W. Field retired) general sales manager, and J. A. Craig, secretary treasurer. Chairman of the board is W. Garfield Weston, distinguished Canadian industrialist who is chairman of the E. B. Eddy Co. at Hull, Que. Charles Craig is plant superintendent, Arthur Saunders, engineer.

Directors include W. S. Kidd, general manager of the E. B. Eddy Co., R. A. Robertson of Toronto, H. A. Sneyd, and A. H. Williamson, Vancouver financier, the Mayhews and Mr. Weston.

Active head of the company in Victoria, R. Logan Mayhew, celebrates his birthday on the anniversary dates of his company, which was established in 1914. He has been prominent in Victoria affairs for several years.

Watervliet Paper Co. Acts to Save Hospital

Watervliet Paper Co., of Watervliet, Mich., has stepped into the breach to save a local hospital in that community and to make it a community institution.

The paper company has put up $32,500 and a like amount must be raised by the chamber of commerce in order to keep the hospital. G. K. Ferguson is president and general manager of the Watervliet Paper Co.

PULP
PAPER

Domestic Export Import

BULKLEY, DUNTON & CO., INC. • BULKLEY, DUNTON PULP CO., INC. • BULKLEY, DUNTON PAPER CO., INC.
BULKLEY, DUNTON CELLULOSE EXPORTS INC. • BULKLEY, DUNTON PAPER (NEWSPRINT) CO., INC.
CANADA: BULKLEY, DUNTON & CO., INCORPORATED

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ORGANIZATION
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Personals

MIDDLE WEST

J. C. MORRIS, formerly director of research and development at Ohio Boxboard Co., Rittman, Ohio, has recently been promoted to assistant production manager.

Mr. Morris joined Ohio Boxboard in 1937 as a member of the production laboratory staff. Later he was in sales development, and in 1944 was appointed director of research and development and remained in that position until his recent promotion.

A. J. SCHIERL replaced J. H. Miller, who retired last month, as general manager of Whiting Plover Paper Co., Stevens Point, Wis. Thomas A Moore, Milwaukee, is a new member of the board of directors which includes F. B. Whiting, president; Thomas Leech, vice president and sales manager; A. J. Schierl, secretary and general manager, and George A. Whiting, treasurer.

BURT E. ASHMAN, who has been assistant to the executive director and office manager of the Institute of Paper Chemistry, Appleton, Wis., has left that post to be director of auxiliary enterprises at Drake University.

CHARLES A. KEELAN, 63, of Ann Arbor, Mich., who before retirement was superintendent of Bryant Paper Co. for 20 years in Kalamazoo, and also was with Kalamazoo Vegetable Parchment Co., died Aug. 28.

L. A. CARPENTER, treasurer of the Bergstrom Paper Co., Neenah, Wis., made a vacation trip to Puget Sound—his first in that area.

HERE ARE SOME ACTIVE LEADERS in the Michigan Paper Industry, pictured during a moment of relaxation at a recent meeting. Left to right, HERBERT JOHNSTON, Plant Engineer, Allied Paper Mills, Kalamazoo, Mich.; Johnston was elected Chairman of the Michigan Division of the Superintendents' Assoc. for 1948-49. WILLIAM H. ASTLE, Beater Supt., Michigan Paper Co., Plainwell, Mich.; Astle retired as Chairman this year with a fine record of achievement.

ARTHUR COFFIN, Titanium Pigment Corp.; CARL HOLDERLE, Anheuser-Busch, Inc.; C. E. VAN BUREN, Albany Felt Co. of Albany, N. Y.; LESTER LA LIBERTE, one of Mill Supts. of Kalamazoo Vegetable Parchment Co., Parchment, Mich.; CARL SIMMERS, Titanium Pigment Corp.

D. CLARK EVEREST, president and general manager of Marathon Corp., and *FRED BOYCE,* first president of the Superintendents Association, were recently awarded plaques for meritorious service extending over 25 years on the committee for the YMCA's north central Wisconsin area boy's camp Manitowish on Boulder Lake. Mr. Everest has been chairman of this committee during all that period.

OLIN W. CALLIGHAN, of Edgar Bros., Kalamazoo, Mich., underwent a minor operation recently and now says he is fit as ever again as he headed for Minnesota in the past month.

JAMES KEARNEY of Swenson Evaporator Co., division of Whiting Corp., Harvey, Ill., made a trip to England this past month.

WHEN WISCONSINITES GET TOGETHER! Just vacationing. Left to right: GLENN CARROLL, Purchasing Agent and Traffic Manager of Combined Locks Paper Co., Combined Locks, Wis.; RUSSELL J. LEROUX, Manager, Everett, Wash., Pulp Mill of Weyerhaeuser Timber Co. and formerly an executive of mills in Wisconsin; MRS. (Dorothy) CARROLL; MRS. (Margaret) LEROUX; L. A. CARPENTER, Treasurer of Bergstrom Paper Co., Neenah, Wis., and CORRA WILSON, friend in Seattle.

JUDD S. ALEXANDER, 71, of Wausau, Wis., one of the organizers of the Wausau Paper Mills at Brokaw, Wis., died Aug. 18.

WILLIAM ROBINSON HUEY, general traffic manager of Bemis Bro. Bag Co., died recently at his Evanston, Ill., home. He was 69.

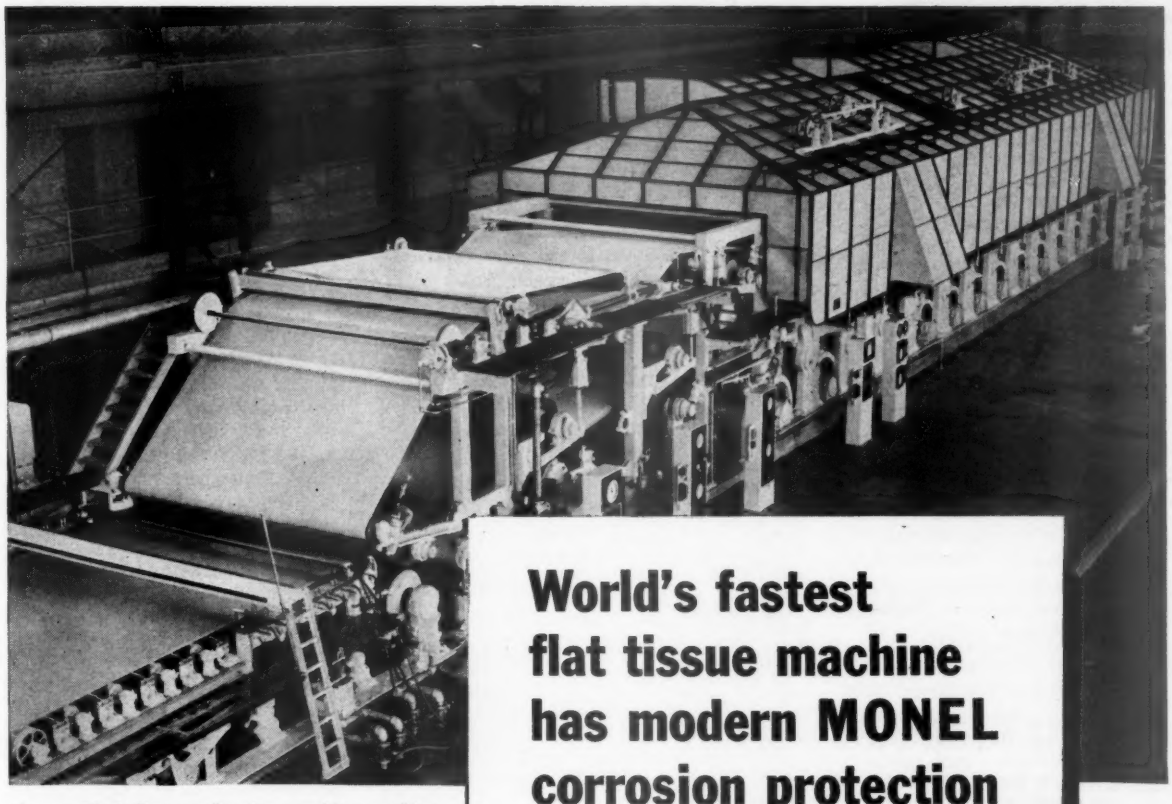
W. R. KELLETT, assistant vice president of Kimberly-Clark Corp., Neenah, Wis., skippered his yacht Winnebago to second place just behind a Minneapolis entry in the Inland Lakes Yachting Association Class A race at Oshkosh, Wis. Several other Fox River Valley paper industry boatmen made good showings in these races.

HARRY F. LEWIS, dean of the Institute of Paper Chemistry in Appleton, received an honorary doctor of science degree at the graduation services of Ohio Wesleyan University June 6.

GLENN CARROLL, purchasing agent of Combined Locks Paper Co., Combined Locks, Wis., recently gave one of his lovely daughters, Pat, in marriage to a young man from Cheboygan. Then when Glenn and his wife, Dorothy, started off on the first stage of a vacation trip that took them to Los Angeles and British Columbia, she delivered the top of the wedding cake to the young newlyweds living in Milwaukee.

WESLEY PEARL, student from the Institute of Paper Chemistry, Appleton, Wis., spent summer months on the staff of Weyerhaeuser Timber Co. pulp mill in Everett, Wash.

ART SCHMALZ, veteran assistant general superintendent at Thilmany Pulp & Paper Co., who was born in the Fox River Valley, drove the car for President Taft when the latter toured that country during a campaign. The mother of the four Schmalzes at Thilmany—Art, Ray, Loyal and Orris, still lives at Appleton. She is 82.



A new Black-Clawson flat tissue making machine, fastest of its kind in the world. Installed in Mill No. 3 of the Fernstrom Paper Mills, Pomona, California.

World's fastest flat tissue machine has modern MONEL corrosion protection

When the Fernstrom Paper Mills of Pomona, California, installed their new Black-Clawson paper making machine, they were sure of two things . . .

The machine was the fastest of its kind in the world.

It would require a minimum of maintenance.

The speed of this giant paper maker is the result of modern design and the skill of its makers. And part of modern design, too, is modern *corrosion protection* in the form of MONEL*. . . insurance against costly shutdowns and high maintenance costs.

This champion of paper making machines is equipped with MONEL suction boxes, MONEL-covered wet end rolls, MONEL saveall trays. Because of the special properties of MONEL, these units will resist the corrosive action of acid and alkaline stocks, white waters, and cleaning solutions . . . *advantages that insure years of trouble-free service!*

MONEL is no stranger to the Fernstrom Paper Mills. Like other leading board and paper mills, they have found that MONEL is an *economy* metal because it lasts longer and needs less maintenance. They have found that it pays to replace vulnerable parts, such as suction box covers, with durable MONEL.

Why not investigate the money-saving possibilities of MONEL for your own mill? Send for your free copy of *"Monel, Nickel, and Inconel in Pulp and Paper Mills."* This illustrated booklet will show you how other mills have solved corrosion and production problems with easy-to-fabricate, versatile INCO Nickel Alloys.

INCO's Technical Service Department is always ready to help you with your special problems concerning corrosion, metal selection and fabrication.

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67 Wall Street, New York 5, N. Y.

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EMBLEM OF SERVICE
INCO
TRADE MARK

MONEL FOR MINIMUM MAINTENANCE

Personals

PACIFIC COAST

RAYMOND HATCH, retired research director of the Pulp Div., Weyerhaeuser Timber Co., has sold his home in Longview, Wash., to his protege and young successor, Dr. Harold Bialkowsky, but Mr. and Mrs. Hatch are staying in Longview and have moved into an apartment, Olympic Court, 1625 20th Ave., Longview, Wash.

G. E. "SLIM" SEAVOY, manager of Swenson Evaporator Co., division of Whiting Corp., Harvey, Ill., can boast of catching a salmon while on a Pacific Coast tour, scoring his triumph in the waters of Georgia Strait, British Columbia. How big? Say seven pounds, more or less.

C. W. AKIN, until recently sales manager of the Bemis Paper Bag Co. plant at St. Helens, Ore., has been transferred to the St. Louis general sales office of Bemis Bro. Bag Co. as coordinator of multiwall paper bag sales.

EDWIN E. HAWKINS has completed 53 years in the paper business, retiring as Tacoma, Wash., division buyer for the wrapping, printing, sanitary and resale items of Blake, Moffitt & Towne. He will be succeeded by *ROBERT JOHNSON* who has been with the company three years.

JEFF SMITH, sales manager for Great Western Division, Dow Chemical Co., is president this year of the French Club in that city.

G. M. MARVIN and *FRANK SIMMONS* received 20-year pins, *CYRIL WRIGHT* and *GEORGE BENSON* 15-year ones, and *V. G. BASOM* and *BOB HOLCOLM* 10-year pins at the recent Fibreboard Products Pivot Club dinner at Port Angeles, Wash.

E. E."GENE" OLFSON, formerly at Portland and Port Angeles divisions of Fibreboard Products, Inc., is now office manager for Fibreboard at the Stockton, Calif., mill.

ERNEST F. BEINE is the new Oakland division manager, Zellerbach Paper Co. Mr. Beine has been an employe of Zellerbach Paper Co. for 17 years, having worked first in Los Angeles and later having managed Nelson Paper Co., a subsidiary in Oakland.

DUCIE CHADS, chemical engineer with Puget Sound Pulp & Timber Co., recently made a visit to his old home in South Central Kansas. Accompanied by Mrs. Chads, Ducie toured through places of interest along the way in his new convertible.

J. D. ZELLERBACH is on extended leave from Crown Zellerbach Corp., while serving in the highly important administrative post as Chief of the Special Mission to Italy for the Economic Co-operation Administration.

OAKLEY W. DEXTER, assistant vice president and director of purchases, Crown Zellerbach Corp., Seattle, has been appointed to the important Seattle Municipal League which interviews and appraises qualifications of all candidates for public office in that region as a public service.

LONG TIME NOW since the Columbia River floods, but some credit for personal exploits which have come to our attention may be in order. For instance, *BOB COCHRANE,* control chemist in the gumming plant of Western Waxed Paper Co., of North Portland, Ore., broke three ribs in a fall while doing a difficult supervising job on the night shift at the badly flooded plant, and stayed on the job.

TWO DAUGHTERS OF A. S. HAMMOND, gumming plant manager at Western Waxed Paper, rallied 18 of their girl friends and two young men who pitched in and helped the plant's skeleton crew move carpets, typewriters, business machines, etc., to dry level.

B. H. MICHELS, woodmill superintendent at the Crown Zellerbach mill in Camas, is still being pointed out to visitors by his fellow-workers as the man who performed a near miracle by keeping his plant operating with machinery partly submerged—at least several days. Belated but deserved compliments to Mr. Michels.

F. ARTHUR HAMMERSMITH, district sales manager of Northwest Lead Co. and Bunker Hill and Sullivan Mining Co. in California, Nevada, Arizona, and New Mexico, has retired and Wallace D. Miracle, of San Francisco, has been appointed his successor.

V. C. GAULT, personnel supervisor, Crown Zellerbach Corp., Camas, Wash., has been elected president of Northwest Personnel Managers Association.

WILLIAM D. WELSH, Crown Zellerbach Corp., San Francisco, spent part of the late summer at his Lake Crescent home near Port Angeles, where he formerly published a newspaper.

AT PORTLAND, ORE., SESSION of the third annual seminar of Pacific Section TAPPI—Left to right, Dr. J. S. Barton and Dr. G. D. King, Crown Zellerbach Corp., Camas; Dr. E. G. Locke, U. S. Forest Service; Hans Bjorkell, M. E., Trammerfors Linne-Och Jern Manufactur, A. B. from Tammerfors, Finland; Dr. Walter F. Holzer, Vice Chairman of Pacific TAPPI, C-Z Corp., Camas; Dr. Holger Erdtman, of Royal Institute of Technology, Stockholm, Sweden, who conducted seminar on "Chemistry of Lignin and Some Non-Carbohydrate Extractives of Wood"; Robert True, Secretary of Pacific Section TAPPI and Northwest representative of General Dyestuff Corp.; Dr. G. Aulin Erdtman, of the Swedish Wood Research Institute, and wife of Dr. Holger Erdtman; Dr. W. W. Moyer, Director of Research, C-Z Corp., Camas; Dr. J. F. Munnett, Department of Chemistry at Reed College, and Dr. A. B. Anderson of Oregon Lumber Co.

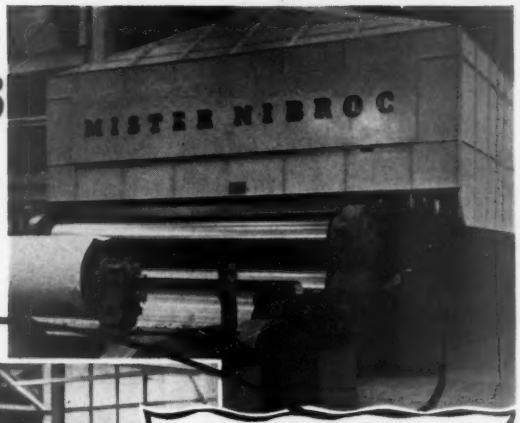
Dr. Holger Erdtman, professor of organic chemistry at Royal Institute of Technology, Stockholm, Sweden, spent nearly a month on the Pacific Coast and several weeks in Wisconsin with his wife, Dr. G. Aulin Erdtman, of the Swedish Wood Research Institute, taking part in a lignin round-table at Appleton, Wis., and later conducting the annual seminar of Pacific Section of TAPPI, Aug. 30 and 31 in Seattle and Sept. 2 and 3 in Portland.

Participants in the seminar "pulled all the stops" in showing the Erdtmans about the Northwest. On the weekend following the seminar sessions they were entertained by Robert and Mrs. True, he being secretary of Pacific Section of TAPPI, who took Drs. Erdtman to Timberline Lodge at Mt. Hood, where they examined various forest types.

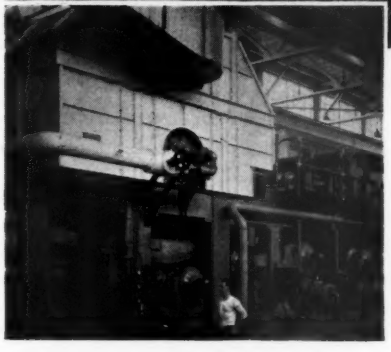
The Erdtmans were also guests of Dr. and Mrs. Walter F. Holzer at Camas, Wash., taking a trip through the scenic Columbia River gorge. Subsequently they were guests of Crown Zellerbach Corp., visiting the Camas mill, and Weyerhaeuser Timber Co. at Longview, Wash. As guests of the Forest Service they had opportunity to see Oregon experimental forests.

They stayed over at Portland to participate in the American Chemical Society meeting Sept. 13-15, before they were taken south into California by Dr. Harry F. Lewis, of the Institute of Paper Chemistry, Appleton.

ROSS Air Systems
For Brown Company's Newest Machine include



- Three (3) Supply and Exhaust units for Roof and Bottom Felt.
- Two (2) Special Transite-and-Steel Hoods of panel construction for dryers.
- Vapor Absorption System to increase dryer capacity.
- Ross-Briner Economizers for heating air and water with reclaimed waste heat.
- Ross Scrubber to solve problem of lint as well as to heat water.
- All Air Heaters, each equipped with temperature control.



Top: Ross Special Panel Type Hood over "Mr. Nibroc" at dry end.
Center: View of Ross Yankee Hood and Main Hood with Yankee Hood Dormer, Exhaust Ducts and Roof Supply Ducts.
Bottom: Yankee Dryer with Ross Hood and Vapor Absorption System.

an outstanding example of economical air handling!

For Brown Company's new "Mr. Nibroc" the Ross Air Systems supply and exhaust over 100,000 cfm maintaining ideal conditions with proper balance.

The Ross Exhaust System is of the draw-through type. Ducts are arranged with cross connections so that supply fans may draw from any one of three points.

We are proud of this Ross installation in one of the industry's newest and finest mills at Berlin, N. H.

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Personals

CANADA

ANGUS P. MACBEAN, who did the field work for the British Columbia government in connection with the experimental utilization of small logs at Ladysmith, B. C., and who subsequently joined Victoria Lumber Co., has been appointed chief forester for the H. R. MacMillan Export Co., who plan a new pulp mill on Vancouver Island.

F. H. LUDWIG, B. Sc., is instrumentation engineer at the new sulfate pulp mill of Bloedel, Stewart & Welch, Ltd., Port Alberni. He was formerly with various industrial organizations in eastern Canada.

J. A. YOUNG, vice president, Pacific Mills, Ltd., Vancouver, has succeeded Benton R. Cancell as chairman of the Western branch, Canadian Pulp and Paper Association. Mr. Cancell resigned following his acceptance of an executive position with St. Regis Paper Co.

LOUIS W. MICHAEL, president of Donnacona Paper Co., Quebec, announces appointment of *L. A. PALMER* as mill manager and chief engineer; *R. J. McDONALD* as general superintendent, pulp and paper division; *W. D. MacKINNON* as general superintendent, board and insulation division.

G. E. SHIPMAN has been appointed technical director and superintendent of the groundwood mill, Donnacona Paper Co., with *JOSEPH McKEOWN* as superintendent of the sulfite mill and wood preparation.

A. W. BENTLEY, for several years woods manager of Bowater's Newfoundland Pulp & Paper Mills, Corner Brook, Newfoundland, has retired from active duties but will continue in a consulting capacity. *ALBERT MARTIN* succeeds him as woods manager.

R. G. MACFARLANE, manager of the lumber and logging department, Fraser Companies, Edmundston, N. B., is urging greater expenditure on forest protection in eastern Canada. He claims that the lookout system is obsolete and that more radio equipment is needed.

W. G. WRIGHT, Quebec forest engineer, is directing a newly organized company known as Limitholders Mutual Insurance Co., the first organization in Canada formed to provide fire insurance on standing timber.

P. G. WILSONHOLM, formerly electrical engineer for Brown Corp.'s La Tuque, Que., mill has gone to the Pacific Coast to join the B. C. Power Commission at Campbell River, which supplies power for Bloedel, Stewart & Welch pulp mill at Port Alberni.

DON BLAKE of Powell River Co.'s engineering department has been appointed assistant mechanical superintendent.

PACIFIC COAST EXECUTIVES who met recently at a foremen's dinner at Ocean Falls, B. C. Left to right—C. W. E. Locke, Resident Manager, Pacific Mills, Ltd.; Harold S. Foley, President, Powell River Co.; R. A. McDonald, Executive Vice President, Crown Zellerbach Corp.; Russell Cooper, Resident Manager, Powell River Co.; M. J. Foley, Executive Vice President, Powell River Co.; R. H. R. Young, Manager of Manufacturing, Pacific Mills.

HENRY T. FISHER, chief chemist for Peter Dixon & Sons, Ltd., of Grimsby, England, attended the annual summer meeting of the Canadian Pulp and Paper Association technical section in Vancouver, B. C., as official representative of the Technical Section, Paper Makers' Association of Great Britain and Ireland.

W. W. BROWN has been appointed technical superintendent of Sorg Pulp Co. at Port Mellon. He came to this country from New Zealand and served in the Sorg laboratory for some time prior to his promotion.

JACK YOUDER, formerly assistant paper mill superintendent for Pacific Mills, Ltd., at Ocean Falls, B. C., has been promoted to paper mill superintendent, succeeding Claude Kelly, who was transferred to the Crown Z mill at Camas, Wash.

CLAUDE KELLY, paper machine superintendent for Pacific Mills, Ltd., and a pioneer of the Ocean Falls, B. C., papermaking fraternity, has gone to Camas, Wash., for Crown Zellerbach Corp. where he will serve on the new No. 15 machine.

ROY OTT, manager of the Donohue mill at Murray Bay, Quebec, with his wife, renewed old acquaintance around Portland, Ore., where they had lived 19 years and he had been on the staff at the West Linn, Ore., mill. Their lovely daughter, Betty, was with them and met their old friends. Mr. Ott was born in San Jose, Calif.

TOMMY GOODRICH, formerly paper mill shift foreman at the Ocean Falls, B. C., mill of Pacific Mills, Ltd., has been appointed assistant paper mill superintendent.

T. CECIL DAVIS of Montreal has been appointed comptroller and assistant treasurer of St. Regis Paper (Canada) Ltd. He was formerly with Canadair, Ltd., and Bruck Mills, Ltd.

EDWARD HOLMES, CBS Deputy of Paper Control for England, was expected to be a visitor in Canada and the United States during the month of October.

A. M. HURTER, the son of A. T. Hurter, head of Stadler, Hurter & Co., of Montreal, is going to spend some time in a plant in Sweden where magnesia is being used partially in a sulfite pulp cooking system. The younger Hurter is process chemical engineer for the Montreal engineering firm.

CHARLES F. MUNT, master mechanic of the Marathon Paper Mills, Ltd., of Canada, has resigned that position to join the staff of Fibreboard Products, Inc., at that company's new East Antioch, Calif., mill.

WILLIAM POUND, formerly plant engineer at the La Tuque, Que., mill of Brown Corp., has joined the staff of Pacific Mills, Ltd., at Ocean Falls, B. C.

SIDNEY ROOFING & PAPER CO., Victoria, B. C., has awarded a contract for the construction of a boiler-house and fuel bin.

E. CHRIS. ERICHSEN, managing director of Holmen-Hellefos, newsprint manufacturers at Hokksund in Eiker; Norway, visited Canadian mills on a recent tour.

JUST ONE DAY by plane took Gerald Penny, mill manager, and Lyle Lang, sulfite superintendent, both of the Bowater's Newfoundland mill, all the way back to Gander, Newfoundland, from Portland, Ore., after visiting Washington state mills. But then it was most of another day by train to the mill at Corner Brook.

Personals

NORTHEAST

ALBERT NEWCOMBE, 69, retired vice-president of Perkins-Goodwin Co. New York, died suddenly in September at Calais, Maine, while on a motor trip with his sister, Mrs. Whitfield Pressinger. Mr. Newcombe was a pioneer paper mill engineer in the U. S. He was born in New York City, educated at Andover and Yale from which he graduated in 1900. He began his papermaking career that year at Lake George Mill of the International Paper Co., Ticonderoga. He effected reorganization of the Finch, Pruyn Company, Glens Falls, in 1906. He joined Perkins-Goodwin in 1934.

B. D. CHAPMAN of Time Magazine has been elected president of the New York Association of Publication Production Managers for 1948-49. Mr. Chapman has been with Time, Inc., for 12 years and is now Time's production operations manager. Charles Moffat of Look, and Edward Lauer of Parents Magazine are secretary and treasurer respectively.

JAMES ALLEN, formerly with Johnson & Johnson Co., New Brunswick, N. J., has been appointed general manager of the Ransom 2-machine tissue and wadding mill of the National Paper Corp., of Pennsylvania, at Ransom, Pa.

ROBERT N. WALLIS, assistant treasurer of the Dennison Manufacturing Co., Framington, Mass., has been elected president of the Boston Control (chapter) of the Controllers Institute of America.

New secretary of the New York City Control is Stuart W. McLaughlin, assistant controller of the West Virginia Pulp & Paper Co. Nelson T. Hampson, comptroller of the Lowe Paper Co., Ridgefield, N. J., was reelected treasurer.

NEW MEMBERS of the Salesmen's Association of the Paper Industry, 122 East 42nd St., New York, are: *JOHN W. CROSSON,* St. Regis; *FRANK J. FOLEY,* Allied Paper Mills, Chicago; *ORLO F. BROWER,* Northwest Paper Company, Cloquet.

JOHN W. "BUMPS" HEMPHILL, assistant manager of the power plants products division of Johns-Manville Corp., and Mrs. Hemphill, visited the Pacific Coast of U. S. and Canada during September.

CHARLES J. SLICKLEN of the Charles F. Hubbs and Co. has been elected president of the Paper Association of New York City at its recent annual meeting.

JUAN P. BOSCH, of Bulkley, Dunton Paper Co., S. A., is on a three months' tour lasting until mid-November of Latin-American countries.

FIFTY YEARS!—In honor of their Fiftieth Anniversary, the Hammermill Paper Co. have given their regular black and white letterhead festive treatment. Above the company name they added a gold embossed Anniversary Seal.

IN INDUSTRY NEWS (left to right)—
JOHN G. FLEMING, Vice Pres. of Fleming & Sons, Inc., Dallas, Texas, where this picture was taken by PULP & PAPER and where the Fleming family is busy on work for installation of their third paper machine—a 7-cylinder 132-inch board machine.
EDWARD B. VAUGHAN, of Bulkley, Dunton Pulp Co., New York, who rolled in a 12-ft. putt for birdie three that gave him and his partner, Bill Schappa, victory over Ray Billows, N.Y. Metro champion, and W. Van Benschoten at Pelham, N.Y. New York Times compared Mr. Vaughan's feat to that of Bobby Jones, who holed a similar decisive shot on the same green in 1929.
WILLIAM H. ALLEN, elected Vice President of United Board and Carton Corp., and continues as Sales Mgr., according to P. M. Loddengaard, Executive Vice Pres. Mr. Allen was with Sutherland Paper Co. for long period prior to 1947. Born in Indianapolis in 1910, he graduated from U. of Indiana, designed several food packages.
MILLARD J. HINES, new Mgr. of Blake, Moffitt & Towne's new Long Beach, Calif., Division. He was resident salesman in the area for several years. BMT also plans a Santa Barbara, Calif., Division.

Manhattan Tappi Progresses

The New York chapter of the Empire State division of TAPPI is moving along swiftly with more than 150 members many of whom meet the second Tuesday of every month (except December and February) at the historical Fraunces Tavern in Manhattan. Officers have been chosen as follows: Chairman, John Calkin, Union Bag; vice president, Louis Reid, Metropolitan Life Insurance; secretary-treasurer, J. H. Perry, Frederic Clark Associates. There is an advisory board which includes Ralph Kumler, American Cyanamid; J. F. Butterworth, Socony Oil; William Willits, Titanium Pigments; and Newton B. Nourse, Brown Co. Others may be added.

Some concern was expressed at first that a New York group of TAPPI might be heavily overloaded with a membership of consultants and suppliers but the great majority of the members of the new group have turned out to be mill men who find it difficult to attend regional meetings upstate or in adjoining states.

Pollution Bill Will Be Before Next Congress

The next Congress will be asked to appropriate funds for Water Pollution Control Act passed by the last Congress as Public Law 845. It proposes an outlay of $800,000 a year for each of the next five fiscal years to erect, furnish, and operate such buildings and facilities at Cincinnati, Ohio, as may be necessary for the use of the Public Health Service in connection with the research and study of water pollution and the training of personnel in work related to the control of water pollution.

The act also authorizes a million dollar annual appropriation for the next five years to be sought at the next Congress to assist in investigations, research and surveys related to prevention and control of water pollution caused by industrial wastes.

Swedish "Tax" on Pulp Is Removed

The Swedish government has removed the "business cycle equalization charge" of 50 Swedish kroner levied on each ton of chemical wood pulp exported from Sweden. This charge had been protested by the American consumers on the basis that it was an export tax and was inconsistent with principles of the Marshall Plan.

News of the abolition of this "tax," which amounted to $12.50 per short ton, was described by Karl A. Clauson, executive secretary of the Association of Pulp Consumers, Inc., as a constructive move. European wood pulp has been offered in the American market at a premium of $20 to $60 per ton above domestic and Canadian pulp. It is anticipated that the European price differential will be partially reduced.

Pulp and paper committee meetings in connection with ECA were being held in Paris the middle of September, it was learned through a reliable source by **PULP & PAPER**. International representatives, including the sales managers of at least two Swedish companies, were present and it was understood that pulp allocation was one of the main subjects.

Russian Methods for Increasing Production

A Swedish magazine quotes a Russian newspaper as stating that Russian poets and other writers are being utilized as workers in Russian paper mills to increase production. The idea purports to serve three purposes; namely. these writers are state propaganda representatives, alleviate the labor shortage, and help make paper so that their books can be printed in larger numbers. In many mills the young Russian writers work as apprentices during the day, and in the evenings address groups of workers at club houses, exhorting them to achieve new production records.

Personals

SOUTH

Peter Borlew Becomes Fernandina Tech. Supt.

Peter B. Borlew has been appointed technical superintendent of the kraft pulp and liner board plant of Container Corp.. of America in Fernandina, Fla.

His recent experience in Germany since 1946 comprised such interesting activities as serving as the technical advisor to the Pulp and Paper Subsection of the Office of Military Government (U. S.) in Berlin and as the U. S. representative on the Inter-allied Commission for the Level of the Production of the German Pulp and Paper Industry. Initially a member of the organization known as Field Information Agency, Technical (FIAT), he also interviewed leading personalities of the German pulp and paper scientific and technical world.

Mr. Borlew surveyed over 100 mills in all four occupation zones covering pulp, paper board and wood waste utilization plants. Previously to his overseas assignment, he was connected with the technical department of Nekoosa Edwards Paper Co. in Port Edwards, Wis., as assistant research director.

KIRK SUTLIVE, public relations director at Union Bag, Savannah, Georgia, has been back on the job for several weeks after a serious illness of three months. But the popular Union Bag executive, also active in civic affairs in Savannah, looks very hale and hearty, one of our editors reports.

PALMER O. GREENE has succeeded Jeb Darby as Houston, Texas, representative of Cutler-Hammer, Inc. Mr. Darby was transferred to San Francisco. Mr. Greene was formerly in Milwaukee but at one time was in Georgia. The Houston office is in the West Bldg.

HENRY W. BORMAN, assistant to President *ERNEST ROSSITER* of Southern Paperboard Corp., Port Wentworth, Ga. and one of the more expert golfers in the industry, has built himself a charming home on the edge of Port Wentworth but close to the new mill.

ROBERT N. HOSKINS, 31-year old industrial forester for Seaboard Air Line Railroad, has been awarded the honorary state farmer degree by North Carolina, South Carolina, Alabama and Florida for his outstanding contributions to farm youth and forestry programs. His picture and achievements were featured recently in a national picture magazine.

TOP MILL OFFICIALS OF UNION BAG & PAPER CORP., Savannah, Ga., are shown here cooperating in an important civic movement by joining with more than 4,000 employes of that mill in undergoing the routine X-ray examinations and blood tests for TB. This tent-covered clinic was set up on the plant grounds by state health department. T. T. DUNN, Resident Manager, is at left, being X-rayed. Two gentlemen in shirtsleeves, in foreground, waiting their turn, are DR. C. E. HARTFORD (left), Manager of Pulp & Paper Division, and DR. M. L. TAYLOR, Director of Technical Division. Behind them is JOHN T. HARRISON, Manager of Bag Division.

H. Y. CHARBONNIER of Union Bag, Savannah, Ga., is president of the Mary Calder Golf Club, which was named in honor of the mother of Union Bag's president.

PAUL SCHOEN, manager of Forest Farmers' Cooperative, has announced that the second annual Southern Forest Festival will be held at Valdosta, Ga., on October 5-7. As general chairman for the event, Mr. Schoen has scheduled the featuring of practical forestry methods, as well as a pageant that will be outstanding.

MAHLON B. GRAHAM has taken the post of Power Department Superintendent at North Carolina Pulp & Paper Co., Plymouth, N. C.

PAUL B. CORNING, Cornell, Class of '27, whose appointment as Plant Engineer of Rayonier's unique Southern pine-sulfite pulp mill at Fernandina, Fla., was announced in the August issue of PULP & PAPER. Mr. Corning has had extensive experience in the mills of International Paper Co. and West Virginia Pulp & Paper Co., and was a Captain in Chemical Warfare Service in World War II.

Howard Hinman Manager at Bastrop

Howard Hinman, son of John H. Hinman, president of International Paper Co., has been named mill manager of the Bastrop, La., mill of the Southern Kraft Div. of International Paper. He was formerly assistant mill manager of the Camden, Ark., mill.

Young Hinman succeeds Joseph E. Pate who became manager of the "Louisiana" mill, which is also at Bastrop. Arthur H. Dumaree, formerly "Louisiana" manager is now manager of the By-Products Division headquarters, Panama City, Fla. This is a new division indicative of the trend toward full integration of operations through to the finished product.

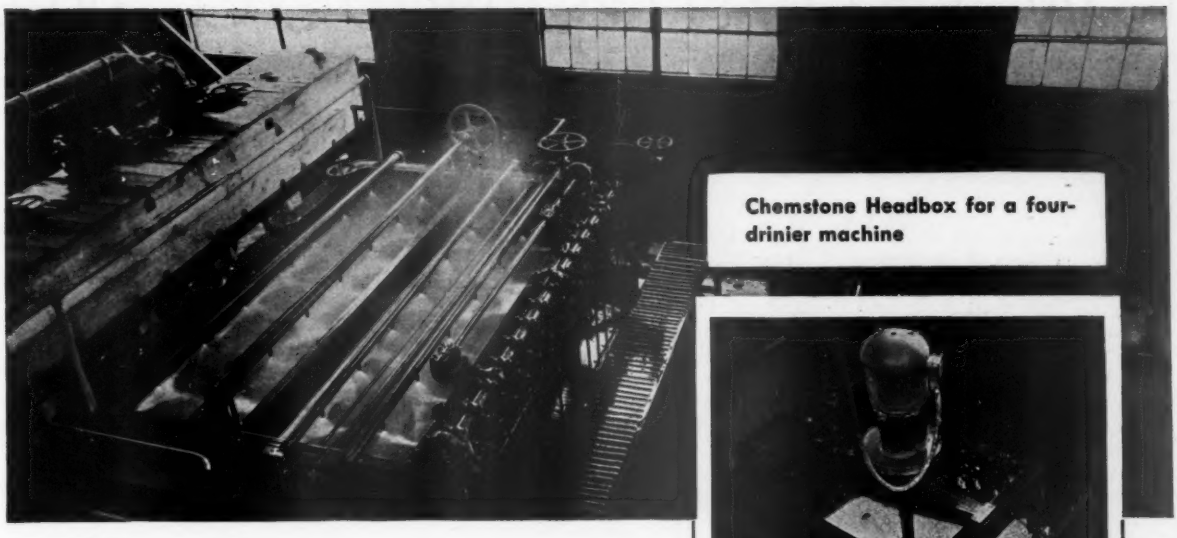
Atenquique Engineer Joins North Carolina Firm

Sigrid Solvason has joined the firm of C. H. Guest & Sons, Greenville, S. C., as construction manager on pulp and paper mill construction. The well known engineer was formerly with George F. Hardy & Son, New York, and was the Hardy engineer on the construction of the famous Atenquique mill in Mexico, described in detail in our May 1948 issue.

Textbooks Sales Over 47,000 Copies

The Joint Textbook Committee of the Paper Industry, Room 918, 342 Madison Ave., Ney York 17, reports that 900 copies of textbooks upon "The Manufacture of Pulp and Paper" were sold during the first half of 1948. This brings the grand total to 47,662 copies (five volumes) since publication of Volume I, first edition, in 1921.

Progress is being made on a completely revised and re-written Fourth Edition, says Royal S. Kellogg, secretary of the committee.



Chemstone Headbox for a four-drinier machine

Chemstone Consistency Regulator Box handling poplar groundwood

Chemstone

builds better boxes

YOU CAN'T MISS GETTING BETTER BOXES when you build with J-M Chemstone. Better because they will not swell or shrink . . . will remain unaffected by the severe operating conditions of a hard-driven pulp and paper mill.

Paper mill operators have found that Chemstone boxes are free from metallic oxides, resist both mild alkalis and acids. Chemstone boxes also prove unusually resistant to the accumulation of slime and bacteria —but when flushing *is* necessary (as in the handling of some groundwoods), Chemstone boxes are easily cleaned by the simple process of hosing down.

An asbestos product, Chemstone is strong though relatively light in weight. It can readily be worked into headboxes, consistency regulator boxes, flow boxes . . . as well as linings for wire and couch pits and similar applications. Only ordinary metal-working tools are required. Chemstone Cement, applied like putty, gives extra protection and water-tightness in covering bolts and making up joints. For full details, write Johns-Manville, Box 290, New York 16, N. Y.

Bleached Stock Lines of Transite Pipe

. . . And TRANSITE PIPE reduces sliming—helps keep stock lines clean!

Made of asbestos and cement, this pipe has proved its value for white water lines, stock lines, washed pulp lines, and service water lines. It is a low friction pipe that saves power and is free from metallic oxides. Its fibrous nature provides excellent resistance to shock loading. Light in weight and easy to handle, Transite Pipe also cuts installation time and costs.

Johns-Manville PRODUCTS FOR THE PAPER INDUSTRY

New Groundwood Mill

WESTMINSTER MAKES PULP

The new groundwood mill of Westminster Paper Co. at New Westminster, B. C., on the Fraser River, has the distinction of being the first plant of its kind on the lower mainland of British Columbia.

It was established primarily to insure a continuing supply of groundwood pulp for the existing paper mill. Previously, the company had to depend on other pulp mills for its raw material. Operating six days a week, the groundwood plant has a rated capacity of 30 tons, and a bleach system will be installed in the near future.

E. M. Herb, son of Chairman J. J. Herb, is president of Westminster Paper Co., with John Ashby as mill manager. Harry Bamford, formerly of Pacific Mills, Ltd., at Ocean Falls, is superintendent of the groundwood plant. The Herbs hail from Fox River country of Wisconsin.

Machinery for the groundwood mill is installed in a building 84 feet long by 67 feet wide, by 27 feet high, which houses grinders, screens, pumps, etc. It is covered with a relatively light but sturdy roof of aerocrete slabs, quickly assembled, covered with roofing and shows promise of good service. Three walls of the building are built up on the concrete reinforced structure with concrete blocks for simplicity of construction and to allow an easy method for further expansion if warranted.

Four Waterous three-pocket grinders are in operation with 27-inch by 54-inch sandstones connected up to a 2250-horsepower English Electric motor through a Waterous flexible coupling.

Hemlock slab wood is used exclusively, and is transported in skips of 2½ cords each, by the company's own carrier from adjacent sawmills. This wood is in four-foot lengths and is deposited on a table conveyer, where it is cut up into two-foot lengths by a slasher saw and continues on by conveyers to the grinders. The final conveyer runs directly behind the grinders from which point wood is removed by the operator and piled between the machines.

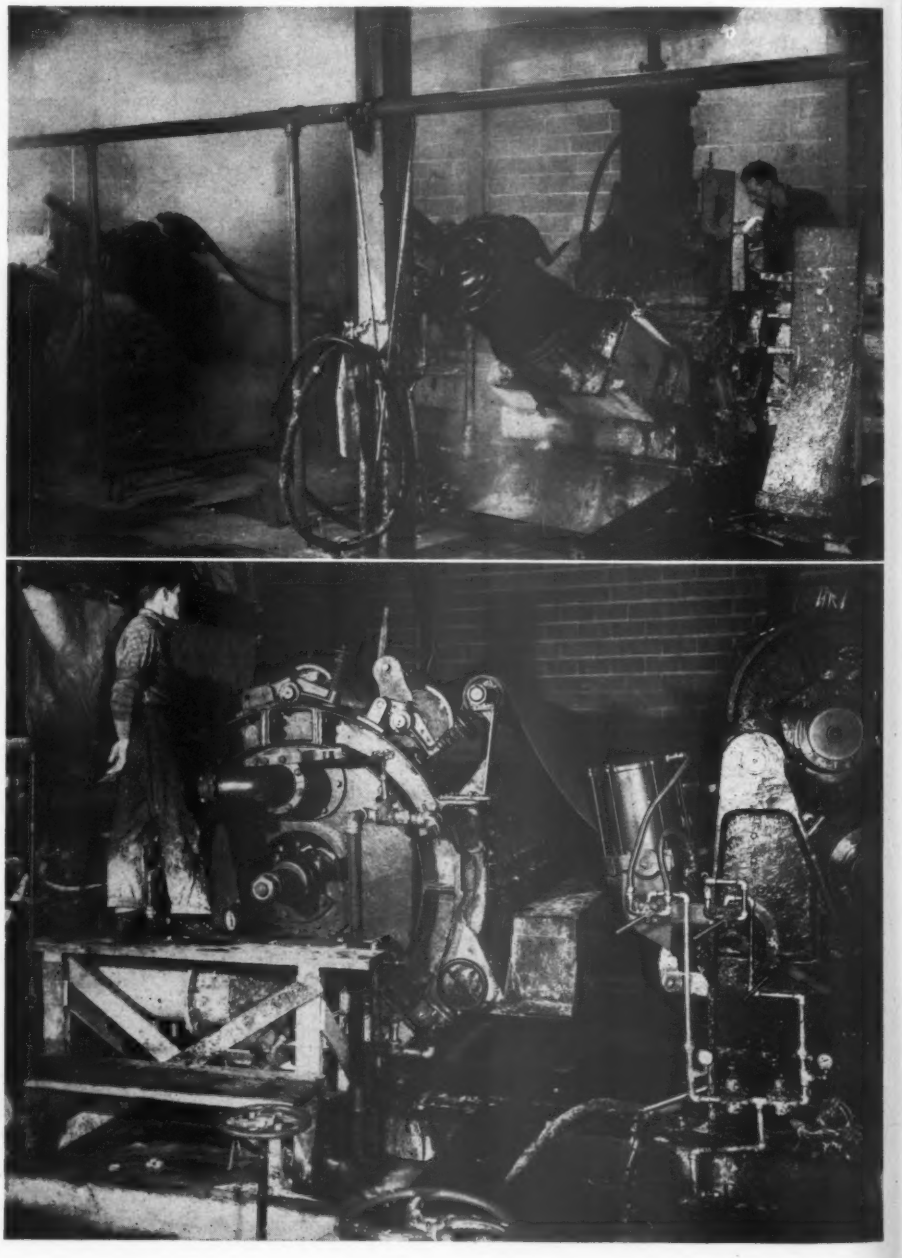
Bark from the wood is conveyed on a rubber belt to the hog fuel bunkers for steam plant usage. Stock flows from the grinders into a ditch, thence to a Bird Machine Co. Jonsson knotter screen and is pumped to a storage tank (dimensions 22 feet wide, 41 feet long by 11 feet high).

There are two midfeathers in this chest and for agitation there is a Fleck single shaft on which are assembled two four-blade adjustable 50-inch propellers turning at 87 R.P.M. Alexander Fleck, Ltd., supplier of this unit is affiliated with Black-Clawson-Shartle Bros.-Dilts Machine Works.

The stock flows down the center channel and out to the right and left channels in the streamlined chest. This provides excellent agitation, according to Mr. Bamford, who adds incidentally that most of the company's equipment, particularly fittings, has been plastic sprayed—the stock and white water lines of transite; and smaller sizes in brass.

Stock and white water are pumped in a common line to the Cowan screen located directly behind the Kamyr machine, supplied by Paper Machinery, Ltd. The Kamyr is a 120-inch sheet machine preceded by a small decker for removal of

Top, Two of battery of four Waterous 3-pocket grinders in operation at Westminster Paper Co.'s groundwood mill at New Westminster, B.C. Lower, Section of Kamyr machine at the new Westminster mill.



excess water which is returned for re-use in the system.

The Kamyr is equipped with two brass rolls, one grooved and the other smooth, and is supplied by a Nash pump and the sheet is picked up on a rubber breast roll, then passed through the main presses. A draw is in effect from the breast roll to the presses in order to maintain correct tension. A vacuum of approximately 16 to 17 pounds gives satisfactory results. All presses are operated on air pressure.

Deliveries of equipment were behind schedule and consequently the important thing was to manufacture pulp as early as possible for use in the Westminster Paper Co.'s mill as well as at the associated mill in Bellingham, Wash.—Pacific Coast Paper Mills, of which F. J. Herb is vice president. J. J. Herb is also chairman of the board of the Bellingham mill.

Improvements are now under way to complete the finished product in a more acceptable form for shipment, namely, to ship in roll form.

Frequent tests are made during the 24-hour run—of moisture and ream weights from various parts of the sheet—and the whole operation is kept in close check for uniformity and quality.

Doubles Production At Westminster Paper Co.

Production was more than doubled last year by Westminster Paper Co., New Westminster, B. C., and net sales jumped from $1,901,885 in 1946 to $3,949,354 in 1947, President E. M. Herb told shareholders in his annual report.

In addition to the new paper machine, the new steam generating unit and steam turbines are now in operation. The groundwood mill went into production recently and several new converting units have been installed.

Masonite Corp. Laying Plans For New California Plant

While many problems involved in the utilization of redwood are being worked out, much preliminary work is being undertaken by the Masonite Corp. at Ukiah, Calif., where the company's first western manufacturing division will be located.

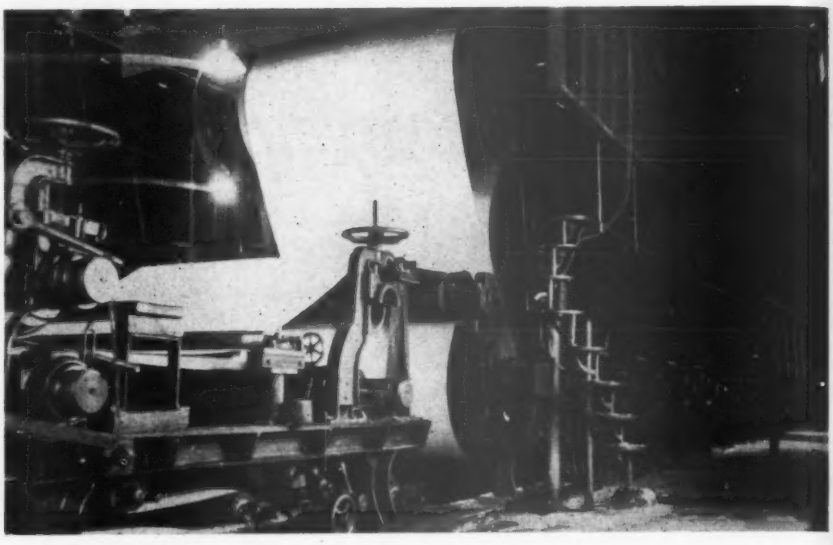
E. T. F. Wohlenberg, manager of the Ukiah operations, said the plant will consume about 45 million feet of redwood logs a year in making Masonite board.

The company has 57,000 acres of forest land, 50,000 acres of which carry timber of varying ages and classes. Operating on a sound forestry basis, some of the new material will be in the form of thinnings, some will be developed by a break-down mill operating in the larger timber.

IN REVERSE—Before the war a good part of our fancier packages and packaging material was imported from Europe. The war ended that—apparently for all time. American packages have made such great progress in the past few years, especially in plastic, but it is expected that Europe will become a big market for our products once that continent returns to normal. The biggest job will be learning the needs, likes, and dislikes of European customers. (Printers' Ink.)

AN OPERATION AT MOBILE

Said to Be One of Few of Kind



CYLINDER MACHINE at Mobile Paper Co., Mobile, Ala., running groundwood direct from Roberts Grinder (Appleton Machine Co.) and making 55-point board. This has attracted interest in the South.

To that rhetorical question, "What's new in the South?" there is an answer furnished by R. E. Hartman, president, Mobile Paper Mill Co., at Mobile, Ala., in the shape of pure groundwood run through a cylinder machine into 55 point board and shipped to customers in sheets of approximately 8% moisture.

The furnish comes directly from a Roberts grinder manufactured by Appleton Machine Co., with Reliance Electric & Engineering Co. electronic V-S feed drive. This original application of the electronic all-electric adjustable speed drive for A-C circuits to grinders was described in the June, 1947, issue of **PULP & PAPER**, page 24.

Nothing is added to the run. The sheets going through the machine is shown in accompanying photograph.

"They tell us we can't do it," says Mr. Hartman, laughing, "but there it is."

The men running the machine nod in confirmation. Nothing is added. The paper, cut into sheets, is being strapped into bundles and loaded out in carlots, which is also an unusual process.

The grinder turns out from 45 to 55 tons daily, itself a good record.

A New Machine Installed

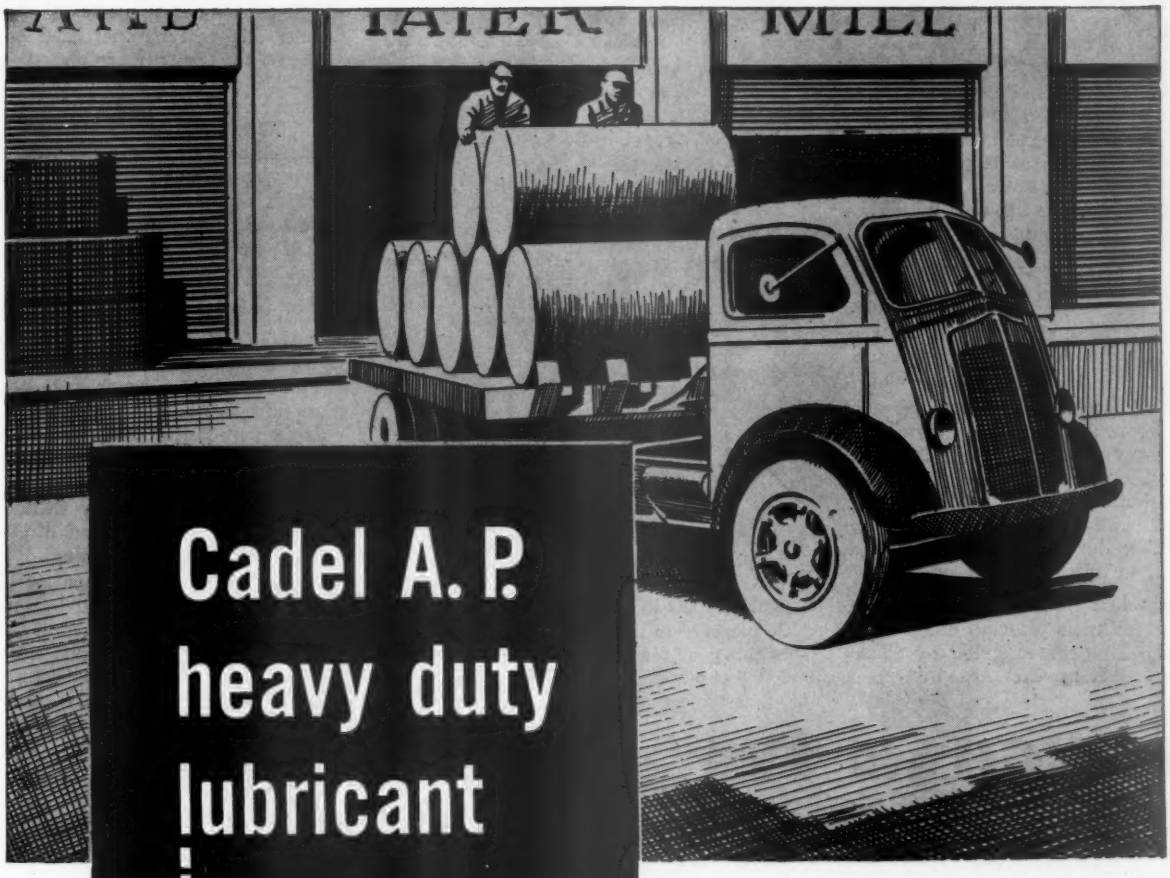
While the old cylinder machine runs busily on straight groundwood sheets, the furnish from the pulping operation from waste paper goes to the new Black-Clawson paper machine. This is housed in a new addition to the mill. The structure has walls and roof of the new Johns-Manville corrugated asbestos siding.

The improvements at the mill were viewed by Mobile business men and friends of the company in an "open house" celebration held May 25-26.

The new machine is served by five 48-inch cylinders immersed in vats manufacturned by Cheney-Bigelow Wire Works of Springfield, Mass. The stock goes from the beater room to three Kalamazoo Tank & Silo Co. tile stock chests. A fourth vat is to be added.

DAVID B. KUHE (left) has been appointed Assistant Manager of Crossett, Ark., where K. O. Elderkin, formerly of Canada, is Manager. This picture was taken in Atenquique, Mexico, by PULP & PAPER early this year, where Mr. Kuhe was Mill Manager of that new Mexican kraft mill in the Jalisco city. He was formerly Manager of kraft mills at Plymouth, N. C., and Panama City, Fla., and spend 17 years in both northern and southern International mills. Native of New York City, he graduated from U. of Wisconsin while living in Chicago.

VERN L. MAUERMAN, whose appointment as Wood Preparation Supervisor for both sulfite and the new kraft pulp mills at Longview, Wash., of Weyerhaeuser Timber Co., was announced in a recent issue of PULP & PAPER. Mr. Mauerman was closely identified with construction of new type hydraulic barkers as an engineer for Weyerhaeuser. Production at Longview's big log and small log hydraulic barking plants and new slab chipping operations at all three of the Weyerhaeuser sawmills in Longview, set up by him, are under his direction. These make five distinct chip production units for him to direct, with extensive conveyor systems to the pulp mills.



is the only motor oil you need

In trucks, tractors and diesel or gasoline power plants in the mill, Cadel A. P. Heavy Duty Lubricant is the only cylinder oil you need for finest lubrication and most efficient operation. It's a truly *all purpose* oil that will simplify your oil purchasing and storage, and eliminate the risk of using the wrong oil in any engine. Cadel is available in SAE grades 10 to 50.

Cadel A. P. is made from a top-quality, specially treated base oil. A superior, multiple purpose additive prevents oxidation, bearing corrosion and engine deposits. Oil lines, valves and rings are kept clean and free, and pistons and cylinder walls are mirror-bright. For fewer repair bills and overhauls, and for generally more efficient operation, use Cadel A. P. exclusively.

Call your Associated Representative for expert help on any lubrication problem

TIDE WATER ASSOCIATED OIL COMPANY

HIGH YIELD PULP SYSTEM
Uses Sutherlands and Jonsson Screens

President Harold S. Foley of Powell River Co. announces that work on what the company describes as an entirely new process of producing sulfite pulp is nearing completion at the Powell River, B. C., mill. It is designed to increase the newsgrade sulfite pulp yield.

"We hope that this increase will be in excess of 30%, which will result in a reduction in our manufacturing costs and further conserve our timber resources to the extent of about 7,000,000 feet annually."

The new system will cook on a yield basis of approximately 60%, instead of 45%, as at present. The pulp is blown to blow pits in the normal manner and by a combination of screening and refining is brought to a suitable newsgrade pulp. The system is flexible; any degree of yield can be established up to the proposed 60%.

Stock is taken from the blow pits into a chest for dilution prior to pumping to the Jonsson knotters, supplied by Canadian Ingersoll Rand Co. Accepted stock is screened in centrifugal screens and the accepted stock from the Cowan screens is deckered, dropped into a storage tank.

This accepted pulp is passed through a Sutherland refiner and is then ready for news machines.

The rejects from the Jonsson knotters are taken into a separate knotter reject system which is used for wrapper. The rejects from the Cowan centrifugal screens are deckered to bring the rejects up to the desired consistency and are passed through another Sutherland refiner. The refined stock is screened on flat screens with the accepted stock being used for newsprint furnish while the rejects from the flat screens are put back into the wrapper reject system.

Conservation of fibers becomes of increasing importance to Powell River Co. as production of newsprint climbs. The total in 1947 was 244,974 tons, compared with 187,789 in 1945, an increase of about 30 per cent in three years. Before the end of this year the company will have its new No. 8 paper machine in production.

BELLINGHAM TYPE BARKER
Being Made for Australian Mill

Associated Pulp & Paper Mills Proprietary, Ltd., at Burnie, Tasmania, Australia, is the first overseas company to order an hydraulic log barker.

They will have the type barker which was introduced at Puget Sound Pulp & Timber Co. in Bellingham, Wash., and described in the October, 1947 issue of **PULP & PAPER**.

Clifford B. Hansen, newly appointed superintendent for the Australian mill's wood plant, flew from Australia to Vancouver last summer, accompanied by Ray F. Turnbull, principal research officer-in-charge, utilization section, Australian government division of forest products, Melbourne.

They made a tour of cities on this continent, inspecting machinery and wood utilization methods. They were joined in Vancouver by Harold F. Shiriffs, deputy general superintendent of Associated Pulp Mills and Robert H. Hurle, chief engineer of the Burnie plant.

As the products of the company are bleached pulp and standard fine writing papers with eucalyptus timber supplying most of the wood requirements, successful bark removal by the Bellingham-type log barker impressed the visitors, and orders were placed with the Canadian Sumner plant.

Structural steel will be supplied from Australia and pumps and motors probably will be shipped from England. Sumner, however, will provide log hauls and log deck machinery, log turners, log loaders, two 8-foot bandmills, two air-operated sawmill carriages with shot gun feeds, one slab chipper and one whole log chipper with other incidental machinery.

Sir Walter Massey-Green is managing director of Associated Pulp and Paper with headquarters at Melbourne, while Harry B. Somerset is general manager at Burnie.

Another long-distance order for woodworking machinery recently handled by Canadian Sumner was one for vertical band resaws for the Lever Bros. subsidiary operating on the Gold Coast of British West Africa.

Canadian Sumner Supplies News Mill

Canadian Sumner Iron Works, Ltd., Vancouver, B. C., is also supplying sawmill equipment for the Australian Newsprint Mills of Boyer, Tasmania.

These orders are for log kickers, log stop and loader, Simondson log turner, Lueth skid lifts, complete air-operated log carriage (electric carriage drive supplied in Australia), 10 foot band mill, cant lowering device, 12" x 72" edger, together with an adequate supply of spare parts, sawfiling equipment and other essentials.

Negotiations were initiated for the Australian company in 1947 by L. R. Benjamin, general superintendent, who visited this continent with T. A. Carey, chief engineer, and they were finalized by S. L. Kessell, managing director, who accompanied by R. W. Henry, assistant general superintendent, spent some time on the West Coast recently.

The Boyer plant is the only newsprint producer in Australia. It is controlled by the leading newspapers of Australia. Present capacity is about 30,000 tons annually and this will be increased to 75,000 to 80,000 tons.

The company has ordered a second paper machine from Dominion Engineering Co., Montreal, and will install Tidmarsh ring-type grinders to supplement its present grinding machines. Screen room equipment, beaters, storage tanks have also been ordered.

Major Equipment Ordered For New Wallboard Plant

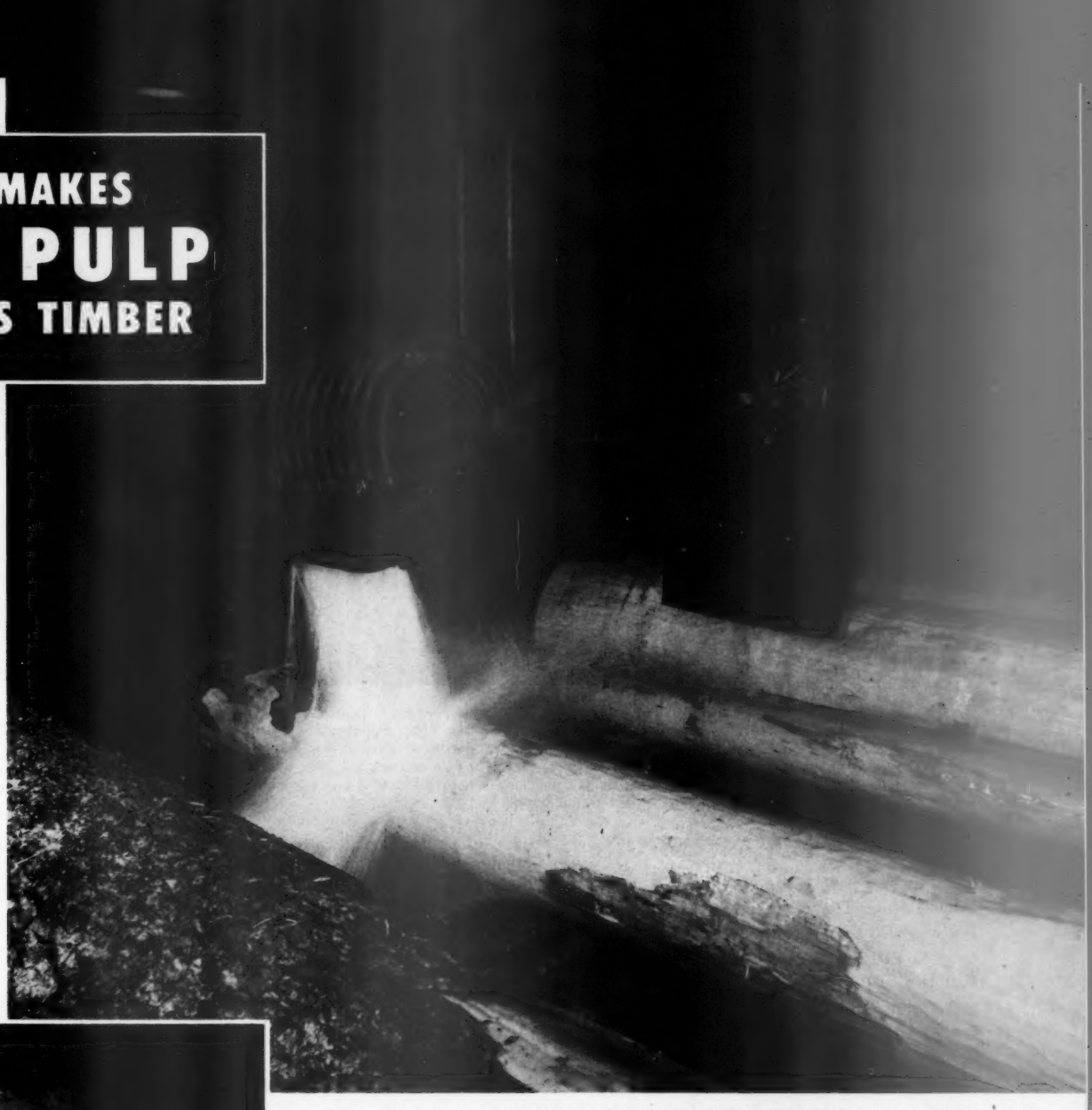
A Downingtown wallboard Fourdrinier board machine, Bauer Bros. Pulpers and an Asplund Defibrator have been ordered as principal equipment for a new insulating and building board plant to be built by Stimson Lumber Co. at Forest Grove, Ore., using wood "left-overs."

O. W. Frost, formerly with U. S. Gypsum Co., will design and direct the construction of the new plant.

Additional boiler capacity has to be provided. This unit will be installed adjacent to the present sawmill power plant. Wood conveyors will be installed between the sawmill and the wallboard plant. Stimson's logs are mostly coming from the famous Tillamook fire area and they have little bark, so barking is not much of a problem.

A BRITISH GOVERNMENT spokesman said British newspapers will average five pages next year instead of four, as a result of increased home production of newsprint and Swedish imports.

PUGET MAKES MORE PULP FROM LESS TIMBER



WATER SHOT THROUGH THE NOZZLES AT 1300 POUNDS PRESSURE TO THE SQUARE INCH PEELS THE BARK FROM A LOG IN A FEW SECONDS. THE LOG REVOLVES WHILE THE NOZZLES MOVE LENGTHWISE DOWN THE LOG.

Barked logs as they come from the hydraulic barker.

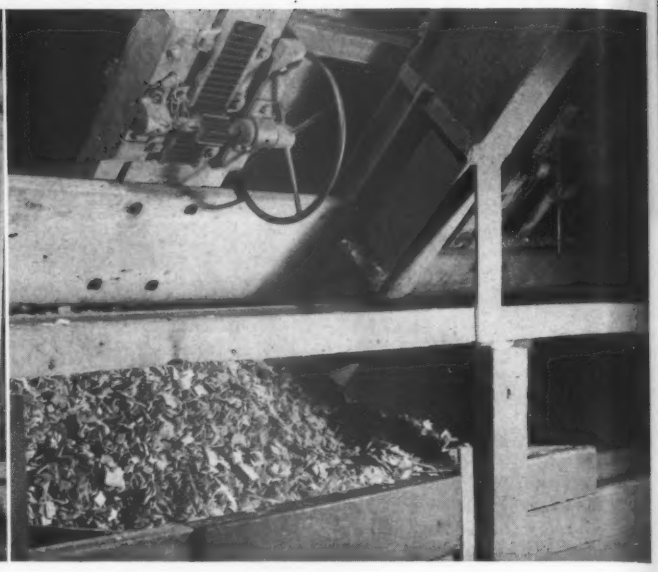
Puget Pulp's new hydraulic barker flays bark from the toughest and most irregular log in a matter of seconds . . . permitting production of approximately twenty per cent more chips from the same amount of logs.

AMERICA'S LARGEST PRODUCER OF UNBLEACHED SULPHITE PULP

CAPACITY: 125,000 TONS' ANNUALLY

PUGET SOUND PULP & TIMBER COMPANY

BELLINGHAM • WASH.



THESE ARE VIEWS of the new type chip storage bins at the Port Alice, Vancouver Island, mill of British Columbia Pulp & Paper Co., JOHN GUTHRIE, Plant Superintendent of the company's Woodfibre, B. C., mill described this free-flowing silo system for storing screened chips, also duplicated at his mill, in the talk he gave at the Canadian industry's Technical Section recent meetings.

At left is an exterior view of the Port Alice silos, each housing a concrete bin 89 ft. high and 48 ft. inside diameter. Bottoms in the form of a "V" provide free flow of chips when the outlet gate is open. At right is a closeup of the outlet gate, showing chips falling into a trough. A Link-Belt H-112 conveyor chain carries chips in this trough.

CANADIAN CONVENTION

(Continued from Page 50)

Powell River Co. and Comox Logging & Railway Co., first fully reported at the time in **PULP & PAPER**, and pointed out that the cost of recovering logging waste material was $9.96 per 100 cubic feet on the basis of well prepared wood. Due to rising costs this figure might now be more appropriately reckoned at 50 per cent higher.

John Ashby, mill manager, Westwinster Paper Co., described recent improvements at his mill, including installation of a new Beloit machine Shartle-Dilts Hydrapulpers andHydrafiners and a groundwood mill, the subject of detailed articles in this issue and recent issues of **PULP & PAPER**. Pictures and full details of the groundwood mill appear on page 78 of this issue.

The Horizontal Chipper

W. W. Brown, technical supervisor of Sorg Pulp Co., described the operation of the Dunbar horizontal type chipper at the Port Mellon mill which was built by Vancouver Engineering Works, which has already been reviewed in **PULP & PAPER**. He pointed out that some of its advantages lay in the economy in space required for its installation, the fact that elaborate built-up foundation was not needed; placement of the knives so as to give a longer cutting edge caused less wear, and the provision for fitting more than one spout to the machine.

Using this chipper it was not necessary to have an oversize screen as the percentage of chips exceeding one inch was negligable. So far as capacity was concerned, test runs showed that 25.6 units could be produced in an hour, although 16 units was closer to the average.

Mr. Brown suggested possible improvements that might be carried out without difficulty. Changing the knives and wear plates could be speeded up, he thought, and adjustment of the disk might be made without removing the entire spout if certain changes in design were worked out. There was also a tendency for the disk and shaft to ride up and reduce the chip quality. A better method might also be found to adjust the belt tension. However, the chipper as at present installed was doing a useful job and with a larger motor it could probably be even more effective.

New Type of Chip Silos

John Guthrie, plant superintendent of the Woodfibre, B. C., mill presented a clearcut and interesting talk on a new silo type chip storage bins built at both the Woodfibre and Port Alice mills of British Columbia Pulp & Paper Co. (R. H. Richmond of the Port Alice Mill helped prepare the talk.) These silo bins bear some similarity to the mammoth chip bins introduced at Soundview Pulp Co., Puget Sound Pulp & Timber Co., and St. Regis on Puget Sound but with a different type of outlet. Photos taken at Port Alice mill and a drawing appear on these pages to illustrate the system.

One difference is that at the B. C. mills the chips are already screened and a V-shaped bottom made with two steel plates

A CHALLENGE TO TECHNICAL MEN

Principal speaker at the official dinner of the Canadian Technical Section in Vancouver was J. A. Young, vice president of Pacific Mills, Ltd., who was introduced by Harold S. Foley, president of Powell River Co. His address was devoted to an historical resume of the pulp and paper industry in British Columbia.

At a convention luncheon, Dr. F. H. Soward, director of international studies, department of history, University of British Columbia, reviewed some aspects of the Marshall Plan in its relationship to the forest and other industries of Canada.

Mr. Young recalled that the first venture in papermaking was in 1889 at Port Alberni, a mill that produced groundwood pulp, paper bags and newsprint, but was closed down after a brief career, due to inexperience and lack of funds.

Mr. Young told of the early efforts of the British Columbia government to attract capital by issuing renewable pulp leases of 21 years tenure stipulating erection of a mill with a capacity of not less than one half ton of pulp for every square mile of timber covered by the lease. By 1912, Powell River Co. was producing newsprint and in 1917, Pacific Mills was operating at Ocean Falls. Even before that time the forerunner of Sorg Pulp Co. was running a mill at Port Mellon.

Sidney Roofing Co. in Victoria was another pioneer, and in 1912 a mill was started up at Swanson Bay, later dismantled. In 1922 Westminster Paper Co. was incorporated, and in 1925 B. C. Pulp & Paper Co. was formed to take over mills established by the Whalen brothers at Woodfibre and Port Alice.

Developments of the present era, he said, are the new Bloedel, Stewart & Welch kraft mill at Port Alberni, projected mills of H. R. MacMillan Export Co. (Nanaimo Sulfate Pulp Co.) the Columbia Cellulose Co. (Celanese Corp.) at Port Edward, and Canadian Western Timber Co.'s plans for newsprint and kraft mills at Duncan Bay. Total expenditure represented by these enterprises, Mr. Young estimated, was in excess of $82,000,000 and investment in the industry already in operation amounts to more than $122,000,000.

"In all of this," declared Mr. Young, "I believe there is a challenge to the technical men of our industry. The large investments were prompted by the prospect of profits. The industry today is, by and large, operating on a profitable basis, but costs are increasing. But pulp and paper selling prices are now beginning to meet sales resistance. Management is today more and more depending on the know-how and ingenuity of its technical men to assist in preserving that profit margin."

empties through a gate to a chain unloader. A cone bottom with revolving circular plate is used at Puget Sound mills. Link-Belt equipment was described as the equipment used at the B. C. Pulp & Paper Co. mills.

Questions brought out that the V-bottom plates have to be smooth to work satisfactory and chips must be fed in the silo at the opposite top side to the bottom side from which the chips flow out. But, finally, the top of the silo can be completely filled without interfering with flow. At the Port Alice mill, it was said, the outward flow of chips started up without any trouble after the ten-day Christmas shutdown last winter. There had as yet been no experience with freezing or other unusual conditions.

One of the most interesting points brought out by Mr. Guthrie was that the entire system from the chip silos to the digesters can be controlled by the pulp mill cook. Automatic controls stop the flow when digesters fill or when there is any trouble along the line. Tere are some interesting excerpts from Mr. Guthrie's talk:

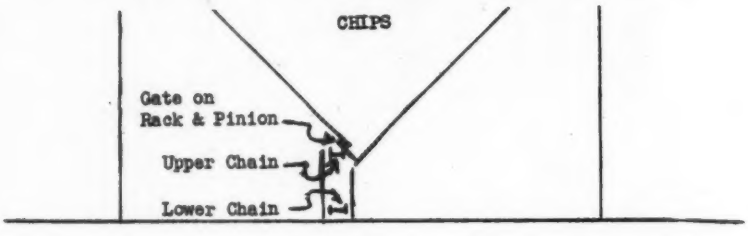
To ensure steady pulp mill operation, and to keep up with the present-day trend towards shorter working hours, were reasons for the new chip storage bins of the silo type at the Woodfibre and Port Alice plants, said Mr. Guthrie. In addition, the silos made it possible to segregate the chips from various species of wood.

After Port Alice bins were destroyed by fire and maintenance trouble and safety called for replacements at Woodfibre, present-day trends in bin construction were reviewed and checked as to how they could be applied to local conditions.

A mechanical chip unloader, as used in some big Puget Sound mills, was designed to work on a cylindrical chip bin with the bottom built in the form of an inverted frustrum of a cone, and this was considered. The open end of the cone is 12 feet in diameter with the walls of the cone making an angle of about 60 degrees to the horizontal. The unloader consists of a disc 17 feet in diameter rotating in a horizontal plane a few feet from the open end of the cone bottom. The bin is equipped with a plough device which scrapes the chips off the disc on to a discharge conveyor. (Incidentally Puget Sound mill engineers say they got the idea for these bins and unloading from a mill on the Middle Atlantic seaboard).

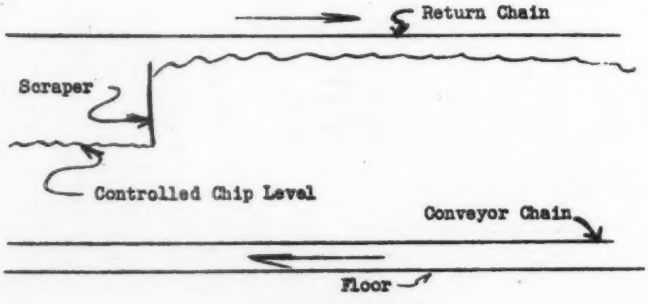
Installations of this type of unloader have proved to be very satisfactory as long as the bin contents flow freely, but at times the contents will hang up, in which case the unloader becomes quite ineffective and considerable labour is involved in freeing the chips, said Mr. Guthrie.

THESE DRAWINGS SHOW HOW CHIPS FEED OUT OF V-TYPE BOTTOM OF NEW CHIP SILOS AT B. C. PULP & PAPER CO. MILLS. DETAILS OF THE OUTLET AND CONVEYOR CHAIN BELOW THE GATE ARE SHOWN IN THESE 3 DRAWINGS.



SECTION OF BIN

CONVEYOR CHAIN



CONVEYOR CHAIN DETAILS

Viewing the problem from all angles it appeared that the greatest difficulty to be encountered in removing chips from storage was not that of removing chips at a fixed rate, but that of being sure that a bin full of chips would flow freely through an outlet.

The storage unit finally chosen consists of three cylindrical concrete tubes set in line with surfaces in contact, he said. Each bin is approximately 89 feet high by 48 feet inside diameter. Wall thickness is seven inches. Each silo has a capacity of 100,000 cubic feet.

The bins were very speedily constructed by using moving forms and pouring concrete continuously until completed. The walls have half-inch horizontal reinforcing rods spaced six to eight inches at the base of the silo, with the spacing gradually increasing to 18 inches at the top. The vertical steel was made up of one-inch and one-and-one-eighth inch wide rods spaced about two-and-one-quarter feet on circumference, a number of which were used as jack rods for raising the slip forms. The bins required seven days continuous pouring.

A cupola was constructed along the top of the bins to house chip charging equipment, and a small passenger elevator was built on the side of one of the bins to allow for inspection and maintenance.

The bottoms were made in the form of a V, with each side at an angle of forty-five degrees to the horizontal, which was the necessary angle for a fre flow. This angle was decided on after determining the angle of repose of loose hemlock chips, namely, forty-one to forty-three degrees. Incidentally, this type of bottom increased the cylindrical bin capacity by about 30%, as compared to cone-type bottoms used on Puget Sound for unscreened chips.

The B. C. mill silo bottoms are of steel plate, 5/16 inches in thickness, and welded into one sheet on either side of the center line of the bins. One side stops short of this center line by about 17 inches, leaving a space for chip discharge. The two steel sheets in each silo are welded to the supporting structural steel. The long chip opening is closed off by a series of steel gates, 17 inches by 48 inches. They can be individually opened and closed by rack and pinion.

A trough type conveyor was built below the gates and a Link-Belt H-112 conveyor chain carries chips in this trough. The bottom of the chip trough at Port Alice is made up of a series of end-grained wood blocks, the sides being steel-lined. The chain return trough at Port Alice is all wood and the jumping of the chain has caused considerable wear, making the surface very uneven. The conveyor assembly at Woodfibre is all-steel lined and has proven very satisfactory. The conveyor trough is 14 inches wide and 16 inches deep.

Mr. Guthrie explained how difficulties encountered in attaining a free-flowing chip stream were overcome. At Port Alice, this problem was solved after the paint wore off the sloping bottoms. At Woodfibre, the bins were at first filled by pouring chips into the center of each bin. A certain amount of bridging was the result. As soon as this was changed to end-filling this difficulty was eliminated. The chip pile builds up in a slope and the chips have a tendency to align themselves with the long axis of the chip parallel to this slope, a fact which makes for a free-flowing chip stream.

When a bin is to be drawn on, gates beneath the bin are opened and flow begins immediately. As the bin empties, more gates are opened, working along the base of the bin.

Control of the rate of flow of chips on the chain in the trough is by means of a plough or scraper set in the trough. If too many chips flow from the bin, they back up behind the scraper and the flow steps. The accepted quantity of chips passing under the scraper is that amount required to fill a digester in one hour. These chips are carried by chain conveyor, inclined belt, elevator and cross conveyor, and through the empty bins above the digesters directly into the digester which is being packed. The chip conveyor assembly therefore operates only when a digester is being packed, which is for a set period of one hour. All drive units on this conveyor system are interlocked so that a stoppage in any section of the

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system results in a complete shut-down of the whole system. Each cook of chips is weighed by Merrick Weightometer with weight indication on the cook floor.

The conveying and elevating equipment for filling the silos has a capacity of 20,000 cubic feet of chips per hour, the normal operating load being about 16,000 cubic feet per hour. The discharge assembly is regulated to convey 10,000 cubic feet of chips per hour or about 95 tons of wet chips (48% moisture).

Papers on Bleaching and Flocculation

Among the papers presented by technical men were those of Dr. Joseph L. McCarthy, Chemistry and Chemical Engineering Dept., University of Washington, on multistage bleaching on kraft pulp, and by Dr. S. G. Mason, of the Pulp and Paper Research Institute of Canada, on flocculation of cellulose fibre suspension.

Here is a summary of 15 "rules" for bleaching as presented by Dr. McCarthy of Seattle, who was last year's chairman of the Pacific Coast section of TAPPI. He said these "overall concepts" were developed in research work he did at McGill University under the late Dr. Harold Hibbert, in collaboration with Drs. E. V. White, J. N. Swartz, Q. P. Peniston, and H. Swartz. Incidentally, Dr. McCarthy and Dr.. Peniston are now engaged in pulp mill research work at the University of Washington seeking ways of using or disposing of mill effluents and financed by Washington state mills.

"Although some of these 15 rules are entirely speculative and may later be proven incorrect, I hope that they may prove to be of interest to you as a review of general concepts of how the bleaching process works," said Dr. McCarthy. His statements are supported by data shown in a number of slides. "It will be assumed that at least the major color-causing constituents of unbleached or partially bleached pulps are the lignins, lignin derivatives, or lignin like substances which may possibly result from condensation of phenolic extractives of wood during cooking," he said, adding "However, the argument will be developed on the basis of lignin."

Here are his points:

1. The composition of an aqueous solution of chlorine is determined primarily by its pH and such a solution contains Cl_2, HOCl, and OCl- with Cl_2 predominating in strongly acidic solution, HOCl in slightly acidic solution, and OCl- in alkaline solution.

2. Chlorination of lignin probably occurs by action of Cl_2 and is favored in acidic solution.

3. Loss of methoxyl groupings from lignin occurs apparently simultaneously with acquisition of chlorine by the lignin.

4. Probably chlorination occurs on phenolic nuclei of lignin structural units to result in splitting of methoxyl to leave quinone or methylene quinone types of structure on the lignin.

5. Chlorination and demethoxylation are rapid reactions and appear to go nearly to completion in a few minutes under usual industrial reaction conditions.

6. Consumption of chlorine continues after chlorination is completed and this slow reaction is thought to be one of oxidation exerted against both lignin and cellulose.

7. Aqueous solutions of chlorine on standing alone away from contact with organic substances appear to undergo slow self-decomposition by internal oxidation-reduction whereby active chlorine is lost and chlorides and chlorates probably arise.

8. Slow reaction of oxidation and cleavage occurs with lignin or derivatives but the nature of the products of this reaction are almost completely unknown. Perhaps quinone, carboxy and other solubilizing groupings form.

9. As a result of chlorination, and perhaps oxidation to a lesser extent, lignin is made soluable in alkaline solution and may be removed from the fiber by washing with alkaline solutions under conditions whereby sufficient time is allowed for diffusion away from the fiber of the non-soluble lignin.

10. In single stage bleaching, cellulose degradation is greatest at pH 4 or 5, and becomes less as the pH is increased or decreased. Highest whiteness is reached under alkaline conditions and whiteness decreases as the pH of reaction decreases, with other conditions remaining the same.

11. To accomplish the same degree of bleaching, less chlorine is required by multi-stage bleaching with intermediate alkaline diffusive washing, then is required by single stage bleaching under comparable conditions.

12. By increasing the temperature of the second stage of bleaching from 25C to 35C, cellulose degradation is increased but degree of whiteness is increased.

13. As alkalinity of the second stage of bleaching is increased, cellulose quality and also whiteness is improved. The same trends are evident regardless of whether the first stage of bleaching is at pH2 or pH4, although much further degration of cellulose occurs when the first stage of the bleaching is at pH4 versus pH2. Of course, the limit of alkalinity of the second stage is fixed by the time permissible for the reaction.

14. As the proportion of chlorine consumed in the second stage is increased in two stage bleaching, cellulose degradation is increases but whiteness is improved, under conditions where the chlorine reacts in the first stage at pH2 and in the second stage at pH 9.5.

15. To secure a cellulose of high whiteness with the minimum of degradation of chemical and physical properties, it is technically desirable to subject unbleached pulp alternately to chlorination in acidic solution, then to diffusional washing in alkaline solution, through as many cycles as possible; it appears necessary to complete the bleaching by use of a gentle oxidation under alkaline conditions. For industrial bleaching of wood pulp, the number of stages to be employed, and also that specific conditions of reaction to be used in each stage, must be decided by computation of economic balances.

Paper on Instrumentation

E. T. Buchanan, assistant chief engineer, Consolidated Paper Corp., described deflection tests with respect to suction and top press rolls, and F. H. Ludwig, of Bloedel, Stewart & Welch, Ltd., presented a comprehensive description of instrumentation in a modern kraft mill—the recently completed Bloedel mill at Port Alberni, B. C.

Mr. Ludwig was complimented by the chairman and others for going into details about this instrumentation set-up and especially for telling about the troubles encountered and how the instruments were made to work and overcome these troubles. The speaker was a lieutenant in the U. S. Navy and an engineer in the U. S. before he came to the new Bloedel kraft mill.

Here are some excerpts of the important portions of his talk:

Mr. Ludwig introduced his discussion by explaining the flow of operation and major equipment at the new Bloedel mill. This was reported fully with illustrations in the February 1948, issue of PULP & PAPER and reprints of that article are available on request.

As our readers will recall, chips are mainly made from sawmill waste, are fed from seven chip silos to three digesters with Esco heat exchangers. Liquors pumped to measuring tanks are fed by gravity into digesters. After blow tank are Bird Jonsson knotters, Reitz Disintegrator for rejects, three-stage Sherbrooke washers, four rows of Sherbrooke flat screens and two Sherbrooke deckers in the screen room, Dominion Engineering Fourdrinier and three presses and Flakt dryer. For liquor there are Goslin-Birmingham evaporators, Combustion Engineering furnace, Dorr causticizing and Traylor kin.

The ex-Navy officer and engineer then told about the instruments.

Weight of chips to digesters is obtained by a Merrick Weightometer. As an operating guide, a remote counter is installed on the charging floor. Two liquor measuring systems each consist of a Bristol bubble-type level recorder with high and low electric contacts. Charging valves are operated by hydraulic cylinders through four-way solenoid valves.

Digester steam header pressure is controlled at approximately 140 lbs. by a Foxboro recording controller. This was originally a proportional controller, but it was subject to quite a large pressure variation and the average pressure had to be considerably lowered to avoid blowing the relief valves at low flow rates. A reset and rate of deviation unit has been added to the controller to remedy this. A Bristol flowmeter measures steam.

A Foxboro packaged control unit is installed on each digester for control of cooking. The temperature pressure relation controllers installed on the relief lines have given excellent service, since the start of operation. During the first few months of operation, digester pressure was controlled manually, but a tentative cam schedule has been in use for some time and has resulted in somewhat lower steam usage with more uniform cooks, higher yields and lower rejects.

Digester temperature and pressure are recorded on a two-pen Foxboro Dynalog recorder with a three-point timer operated switch.

Washer instrumentation starts with a Taylor pneumatic transmitter type level recorder on the blow tank. This instrument is well suited to measurement of stock levels, he said. Blow tank dilution is controlled by a Bristol potentiometer controller with a Bristol thermoverter. The original set-up consisted of a master potentiometer with a pneumatically set flow controller. The use of the flow controller has been discontinued, since it only served to introduce an objectionable lag in valve response, and resulted in unstable control, he said.

Stock to the knotters is controlled by a Bristol recording flow controller, using a rough venturi as the primary element. The controlled element is a diaphragm lever operator which actuates the scoop of a hydraulic coupling on the stock pump. In general, the controller has given satisfactory service, Mr. Ludwig said, and is preferred by the operators to manual control by a valve. One cause of trouble was plugging of the meter lines. During continuous operation, an effective purging system eliminates this difficulty, provided that the meter and piping are kept entirely free of air pockets. Two purges are in use; a black liquor purge, and a high pressure water purge.

Another cause of trouble was partial plugging of the stock pump by large uncooked slivers. He said it is possible that the addition of a rate of deviation unit would permit considerable improvement in this regard, and it is also felt that the use of a valve positioner on the lever operator would tend to stabilize the control.

The rest of the washer instrumentation is by Foxboro. Temperature and flow of hot water to the third stage showers are controlled by recording controllers. Water was originally heated by direct steam admitted to a hydro heater in the water line. Using proportional controllers, it was necessary to use such a wide band that temperature control was very poor, he said, adding it could have been remedied by using a re-setting instrument. However, the system also had the disadvantage of losing an excessive amount of boiler condensate and in order to recover this, a heat exchanger has been installed in the fresh water line to the hot water storage tank and the temperature controller will be installed to control temperature in the tank, according to Mr. Ludwig.

Screen room instrumentation consist of a Bristol bubble-type level recorder on each high density stock tank and consistency controllers of the same type as on the blow tank. In addition to these, a bubble-type indicator has been

(Continued on Page 91)

BACKGROUND OF INDIAN CLAIMS TO ALASKA TIMBER

In connection with the statement made to PULP & PAPER by Secretary of Interior Krug on disposal of the Indian claims on Alaska timber which had threatened Alaska private pulp enterprises which is published in this issue on Page 30, the following gives the historic background regarding the question of Indian aboriginal rights.

These are excerpts of an address given by Al Anderson, secretary of the Alaska Miners Association, of Fairbanks, Alaska, at a Victoria, B. C., meeting of the Pacific Northwest Trade Association.

"We in Alaska have always felt that opportunities for growth and development of industry were limited only by the skill of our hands, the ingenuity of our minds, and the resources of our capital. This concept was fundamentally true until the appointment of Harold Ickes as secretary of the department of the interior. One of Mr. Ickes' first acts was to direct an inquiry to his newly appointed solicitor for the department, Nathan Margold, to ascertain whether or not the native inhabitants of Alaska had exclusive possessory rights to Alaskan waters and submerged lands.

"In a now famous letter to the secretary known as the 'Margold Opinion,' Mr. Margold set forth that the Indians of Alaska did have exclusive possessory rights to submerged lands and waters in Alaska based upon aboriginal rights of tribal occupancy. Shortly thereafter the department of the interior sent its representatives to Alaska to ascertain the extent of these ancestral possessory rights and the areas which they embraced.

"These representatives apparently encouraged the Indians to claim as much of southeastern Alaska as possible. These officials referred not to the development of the territory but to the 'encroachments of the land-hungry Whites—the White invasion from the south and east.'

"As a result of these visits and the department-inspired barrage of propaganda, Indian inhabitants of southeastern Alaska immediately sent in scores of petitions to the department of the interior requesting the secretary to create exclusive reservations in southeastern Alaska embracing not only waters and submerged lands but the adjoining watersheds as well.

"Following hearings conducted by the department of the interior on the question of aboriginal rights in the native villages of Klawak, Hydaburg, Kake, and the town of Ketchikan, the secretary of the interior set aside some 300,000 acres of choice land for the native inhabitants on the west coast of Prince of Wales Island and Kuiu Straits. The principles laid down in the decision of the secretary of the interior when applied to the rest of the Territory of Alaska had the tendency to block further development of Alaska tied up millions of acres of choice timberlands, agricultural lands, waterpower sites, and other principal upland resources essential to the economic development of Alaska.

"It is my belief that the Congress has leaned over backwards to see that the natives of Alaska were protected in all of their actual rights. The Congress has maintained that whatever tribal and ancestral rights of occupancy existed were extinguished in the treaty of purchase from Russia in 1867. To protect what rights the Indians may have had, however, Congress passed the Indian Claims Commission Act, and the Haida and Tlingit Claims Act, whereby the Indians may sue the U. S. government for an amount equitably due for the loss of such rights and title which the Indians may have or claim to have. In setting up forest reserves in Alaska, Congress again recognized only rights of individual occupancy of both whites and natives.

"To protect potential users and developers of Alaska's timber riches, Congress enacted the Tongass Timber Bill during the closing days of the session in 1947. The bill provided that the Forest Service would sell timber in the national forests of Alaska to the highest bidder with the proceeds from the sale of such timber to be held in trust pending the settlement of aboriginal claims.

"However, when the pulp companies indicated to the Forest Service that they intended to bid upon timber in the national forests of Alaska, there were warnings that suit would be brought against them. Such threats of suit against prospective competitive timber bidders—despite the provisions of House Joint Resolution 205, the Tongass Timber Bill—and the insistent claims of the Indians themselves naturally have discouraged capital, which has heretofore been willing to make huge outlays for the establishment of a pulp and paper industry in southeastern Alaska.

"We do not know how it is possible for the department of the interior to reconcile the blanketing of the territory with Indian reservations for the exclusive use and occupancy of the natives

(Continued on page 101)

Lukens Anniversary Observed At Coatesville

Lukens Steel Co. recently observed the 138th anniversary of the continuous making of iron and steel on the banks of Brandywine Creek, in Coatesville, Pa., under a continuous line of family ownership and management.

Three descendents of Isaac Pennock, of the "founding family" are still active in Lukens management, serving as officers and directors. They are Charles Lukens Huston, first vice president; Charles Lukens Huston, Jr., vice president and executive assistant to the president, and Stewart Huston, secretary.

AUTO-SELECTOR CONTROLLER, is an important addition to the line of industrial control instruments offered by The Foxboro Co., Foxboro, Mass. It is described in Foxboro's Bulletin 421, sent on request. This new instrument controls, selectively, from either of two related variables, by positioning a single valve, damper, or other operator.

PAPER & INDUSTRIAL APPLIANCE, INC., New York, announces manufacture and sale of the Brammer Recording Consistency Control in Canada and Newfoundland by Alexander Fleck, Ltd., Ottawa, Ont., Canada, under license.

Canadian Meeting

(Continued from Page 88)

installed for the machine room blending chest. A mercury manometer was connected to the indicator air line as an emergency high level cut-out for the decker chest stock transfer pump. A permanent installation is considered advisable here to eliminate the possibility of damage to the blending chest by over-filling, he said.

Machine room blending chest level is shown by a second indicator connected to the same air set as that in the screen room. A two-pen instrument on each press records air pressure to back and front loading cylinders. Pre-dryer steam pressure is controlled by a Foxboro indicating pressure controller. Flakt instruments consist of a Foxboro recording pressure controller and a Bristol steam flowmeter. Indicating thermometers are also being installed at various points in the Flakt air supply and exhaust ducts.

Evaporator operation is, at present, semi-automatic, he said. Thin liquor feed is controlled by a Foxboro recording flow controller, the split feed being manually adjusted, according to a flow indicator in the line to the fourth effect. Steam flow is recorded on a Bristol meter and steam input is controlled by Foxboro recording temperature and pressure controllers.

A two-point conductivity recorder is at present being installed on the barometric condenser seal box and the contaminated condensate pump discharge to the causticizing plant. Thin and thick liquor storage tank levels are given by two-pen Foxboro recorders. Liquor level in the cascade evaporators is accurately maintained by a Brown indicating temperature controller and drive motor load is given two recording ammeters.

Temperature of liquor to the furnace is controlled by Brown recording controllers on the primary and secondary liquor heaters. Two Bailey three-pen instruments record steam flow, steam temperature, boiler outlet temperature, air flow, furnace draft and cascade outlet temperatures. A Reliance Eye-Hye on the operating floor indicates boiler level. He mentioned other boiler and furnace controls.

Foxboro controllers are installed on the dissolving tank. As originally installed, the level controller operated the dilution valve and the Baume controller the green liquor transfer pump. This did not prove satisfactory, he said, because with existing line and pump sizes, it was not possible to maintain an exact level in the dissolving tank, drops in level resulting in wide Baume variations. The controls were then reversed, and, while it has not been possible to eliminate cycling of the Baume record, the cycling has been reduced to less than Q.8 Baume.

Raw green liquor flow to the clarifier in the caustisizing plant is controlled by a Bristol recording instrument, using an orifice plate as the primary element. A Foxboro recording temperature controller is installed to control steam to the green liquor heater.

Water flow to the Oliver filter showers ahead of the lime kiln, is measured by a Foxboro indicating flowmeter. Instrumentation supplied with the kiln includes a Leeds & Northrup indicating and recording temperature controller with a thermocouple located approximately 80 feet from the discharge.

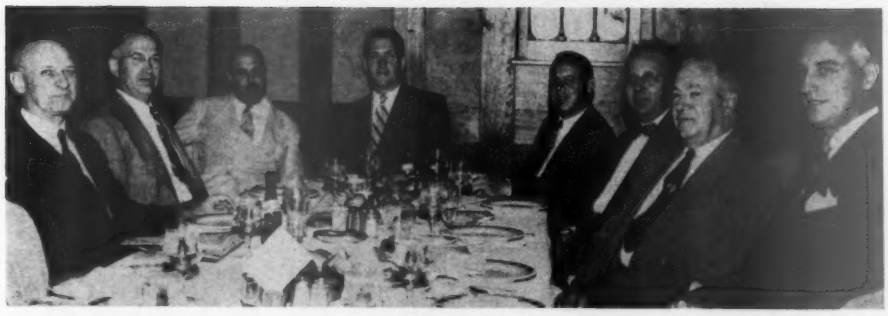
Much more detail on these instruments will be published in the official magazine of the Canadian Technical Section.

Stevenot Reports Relief From Pulp Shortages

Higher domestic production combined with a considerable increase in imports and a small decrease in exports brought about a 9.5% increase in the domestic new supply of wood pulp provided during the first half of 1948, the gain amounting to 655,000 tons. Fred G. Stevenot, president of Puget Sound Pulp & Timber Co. and chairman of Ketchikan Pulp & Timber Co., says in his semi-annual review of the industry's record. Of all grades, 7,549,000 tons of domestic new supply were provided in the first six months of 1948.

"This improvement," he said, gives the industry managers a breath of relief from shortages."

For the half-year, U. S. production totaled 6,396,000 tons, against 5,938,000 tons in the 1947 period. Imports rose from 1,012,000 to 1,205,000 tons.



FOUNDING MEMBERS OF WAITING ROOM NO. 4—On September 9th in a cozy nook of the Tudor Room of the Commodore Hotel, New York, the initial steps were taken for the founding of Waiting Room No. 4 of the International Brotherhood of Migratory Peddlers. Left to right: Ralph Kumler, American Cyanamid; Saxton Fletcher, President of J. O. Ross Engineering Corp.; Nard Jones, Associate Editor, PULP & PAPER; Norman Weil, W. S. Tyler Co.; Lester J. Smith, a guest, who recently resigned a Kalamazoo mill post; H. E. Overacker, Cameron Machine Co.; Jack Loomis, Calco division, American Cyanamid, and F. A. Soderberg, General Dyestuff Corp. Mr. Loomis was elected chairman of WR No. 4: Mr. Overacker, secretary, and Mr. Weil, treasurer. Several others who expressed interest in beginning WR No. 4 were unable to be present. WR's 1, 2 and 3 have been formed in Portland, Ore., Seattle and New Orleans, their objective being to help make industry meetings successful.

NEW ADDRESS for the three central divisions of Rayonier Incorporated which were in Olympia, Wash., is announced as 8th and Levee, Hoquiam, Wash. (P. O. Box 539). These are the Timber, Central Engineering and Industrial Relations divisions for the Rayonier mills, now moved in toto to Hoquiam. The phone number is Hoquiam 2080.

Service Pin Dinner At West Linn Mill

Crown Zellerbach Corp. payed tribute to 1,980 man years of employes' service with the company at a pin dinner Sept. 13 at West Linn, Ore. Jack Hanny, vice president of C-Z Corp., who started in the industry at this mill 46 years ago as water boy, presented the pins to 100.

P. T. Sinclair, resident manager of the West Linn plant, presided as master of ceremonies and was also recipient of a 20-year pin. He introduced John Mulkey of San Francisco, in charge of mill accounting for the entire corporation, who got his start at West Linn, and received a 40-year pin at the plant where he started. Office managers of the Port Angeles, Lebanon, Camas, Port Townsend, Portland, and West Linn offices, who work with Mr. Mulkey, were guests.

Ivan A. Rittenhouse, machine tender on the No. 5 paper machine at West Linn, received a 45-year service pin. Forty-year pins were awarded to Joe Berski, John Gengler, J. A. Rayl, James E. Simpson.

Speaker of the evening was Walter W. R. May, editor and publisher of the Oregon City paper.

Maybe Next Spring Will See Building of Alberta Mill

R. O. Sweezey, representative of Eastern Canadian capitalists supporting a proposed $14,000,000 pulp and newsprint mill of 230 tons capacity, in Alberta, says that construction may start next spring.

Mr. Sweezey says that Calgary is being considered as a site as well as Edmonton, but final choice will probably be made by the Alberta government.

Clipper Masonry Saw Firm Opens San Francisco Branch

San Francisco (422 Market St.) has been chosen as the location for the new Western Divisional branch office and warehouse of the Clipper Manufacturing Co. of Kansas City, manufacturers of Clipper masonry saws for cutting brick, tile, concrete, glass and marble or any masonry material. William E. Davis is district manager in San Francisco.

Rayon Definition

The American Society for Testing Materials has approved the report of its committee D-13 on textile materials, which recommended changes in the definition of "rayon" and adoption of a new generic term, "estron."

Georgia May Have NEW PAPER SCHOOL

Incorporation of the Hunter Field Branch of the University of Georgia and the Herty Laboratory, Savannah, Ga., into a permanent school of technical papermaking is being given serious study, following the advocation of this step by Savannah municipal authorities several months ago. The step would be based upon the importance of the pulp and paper industry in Georgia and its growing importance as a field of employment. The interest of state and local officials not only rises from mill employment but the importance of the industry as a market for pulpwood, which can be raised on a sustained yield basis.

The interest manifested in Savannah rises from recognition of its leaders of the economic opportunity offered by the industry. In addition to the Union Bag & Paper Corp. plant, credited with being the largest integrated mill in the world, Savannah suburbs now have the completed $11,000,000 pulp and board mill built there by Robert Gair Co. and being operated as the Southern Paperboard Corp.

Other mills in Georgia include Brunswick Pulp & Paper Co.; St. Marys Kraft Corp.; Macon Kraft Corp. (now being completed) ; Armstrong Cork Co.; Noble Manufacturing Co., Cedartown, Ga., and National Paper Co., Bolton, Ga. Projected new mills include those at Bainbridge and Valdosta, Ga.

Herty Laboratory equipment has been serving for many and varied tests. While its work is confidential, the roster of projects reflects trends in the industry. The latest annual report reflects three separate and extended tests for southern hardwood use in production of magazine paper. Tests included a wide variety of hardwoods; and kinds of pulp based upon varying pressures and changes in the faces of stones. Groundwood pulp was prepared in each instance.

Interest in northern hardwoods as a source of linoleum was shown by two extended tests, both 30 and 40 grit stone being used to prepare groundwood.

Bagasse was sent in for two experiments in paper production.

While use of southern pine in production of insulation board has already been effectuated in the new plants of Johns-Manville at Natchez, Miss., and Armstrong Cork, at Macon, Ga., tests are still being conducted at Herty Laboratory along these lines.

Walter L. Hendrix, who served as plant engineer under the late Bruce Settle from 1933 to 1947, is director of the laboratory.

CHARCOAL DRAWING PAPER, all sulfite in content, has been classified for duty as drawing paper, not at the lower rate for printing paper as claimed by the importer, who tried in vain to secure the support of the Import Committee of the American Paper Industry for his contention.

New General Electric Drive Being Installed At Angelus

Bob Stevens, manager of Angelus Paper Box Co., Los Angeles, is directing installation of a General Electric helper drive, supplied in conjunction with a new Black Clawson wet-end paper machine. 8he drive has a rated 75-hp., but will use around 60 hp. It is an all-unt set-up for cylinder molds and primary press rolls and is expected to assist in making up a smoother sheet and give more felt and wire life.

Bristol Develops Pyrometer Controller

The development of a proportional current-input electronic pyrometer controller has been announced by The Bristol Company, Waterbury 91, Conn. The instrument, model IE486, is described in Bulletin PB-1237 which can be obtained from the company.

Lick 'Um Treat

There was an after-lunch treat for the **PULP & PAPER** staff recently —licking mint-flavored envelopes. Sample envelopes came to the office with the lick 'um flaps flavored. These mint-flavored envelopes are now being distributed by Sheppard Envelope Co. of Worchester, Mass.

Answer to Question No. 6 — N. C., Tenn., S. C., Ala., Fla., La., Ark., Texas, Ariz.

Fires May Cancel Plan for New Mill

Destructive forest fires in the Blind River country of Ontario in June may result in cancellation of plans for a new pulp mill in that area, according to General Manager Norton Anderson of the Canadian Forestry Association, Toronto. Losses were estimated at $34,000,000, and timber earmarked for a proposed 100-ton pulp mill was included in the 500,000 acres burned, he said.

Cellulose Sponge Plant

A $600,000 cellulose sponge plant is to be established at Shawinigan Falls, Que., by Canadian Industries, Ltd., adjacent to the company's present cellophane plant, and will go into production by mid-1949.

Celloulose sponges are made from wood pulp, caustic soda, hemp, salt and other materials.

Manufacture of cellulose sponges from high grade sulfite pulp manufactured in British Columbia has been started by Canada Pulp Products, Ltd., a new $100,000 industry established on Granville Island, Vancouver, B. C.

Frank Parker of Qualicum, B. C., a former owner in logging firms, is president of the new company.

Vice-president and general manager is Camillo Carlsen, who came to this country from Denmark, where he worked with the Underground, for which he was subsequently decorated by General Eisenhower and Air Marshal Tedder for aiding Allied prisoners to escape.

The project will employ about 30 persons.

Big Mill Picnic

Over one thousand were in attendance at the huge Labor Day picnic sponsored by Local 194, Pulp, Sulfite and Paper Mill Workers of Bellingham, with co-operation of the Puget Sound Pulp and Timber Co. Ideal weather assisted in bringing together the largest gathering ever held by the pulp mill, and attested to the growth of the ever-expanding sulfite mill.

BMT Booklet

Blake, Moffitt & Towne, pioneer Pacific Coast firm of paper merchants are greeting new employees with an attractive booklet "Welcome to the B M & T Family." The publication, 32 pages, is said to be one of the first of its kind produced by a paper distributing house. It is of pocket size, printed in two-color duotone with interesting half tone illustration.

It is easy to read and its friendly style is in contrast to the "do and don't" type of booklet.

Background of Indian Claims

(Continued from page 89)

and the encouragement of these Indian claims on the one hand with a program for the industrial development of Alaska on the other.

"We discussed the Indian policies of the department with the new secretary, Mr. Krug, and he advised us that if any more Indian reservations were to be created in Alaska the public would be given ample notice so that the views of all could be considered and weighed before a reservation was established. To our consternation less than a year later we learned of a proposal to create another reservation of 2,300 square miles, or the equivalent of 75,000 mining claims, on the Kobuk River in the Shungnak area. The Shungnak area is rich in jade, asbestos, and gold, and one mining company has spent over $100.000 in developments there. This company was not even notified that hearings were to be held. We were notified only by publication in the Federal Register—a government document sent by regular mail—which arrived after the hearings had been held.

"We learned of plans to create at least 16 more reservations in interior Alaska. These reservations are planned despite the fact that the Indian has the same rights as the white—he may stake a mining claim, acquire patent, file on a homestead, or get title to land in the same manner and with the same rights as any other citizen. In fact, the Indian has full citizenship in Alaska.

"We have been able to point out to Senator Hugh Butler, chairman of the senate public lands committee, and some of his colleagues, that the policies of the department of the interior are raising havoc with the development of Alaska. In answer to our request for assistance Senator Butler and Senator Watkins have introduced Senate Joint Resolution 162 which reaffirms the historical position of Congress relative to Alaska Indians and their claims of aboriginal and ancestral rights, abolishes the huge reservations already created, and prohibits the secretary of the interior from creating additional reservations.

"We are confident that enactment of legislation along the lines outlined by Senator Butler and Senator Watkins would effectively remedy the sorry situation now existing in Alaska."